

Department of Vater Resources



# Water Conditions and Flood Events in California

Water Year 1975 - 76

Bulletin No. 202-76 July 1977



COVER PHOTOGRAPH TISDALE WEIR AND BYPASS: The low river stage, and dry weir and bypass typify the winter of 1975 - 76.

The Tisdale Weir and Bypass is one of five structures designed to permit flood flows to escape the Sacramento River channel and flow into the Sutter and Yolo Bypass system.

The winter of 1975 - 76 marked the first season in the 63 years of record at this site — including the very dry year of 1924 and the longest sustained drought of record, 1929 - 34 — that no flow occurred over the weir.

Department of Water Resources

Bulletin No. 202-76

# Water Conditions and Flood Events in California

Water Year 1975 - 76

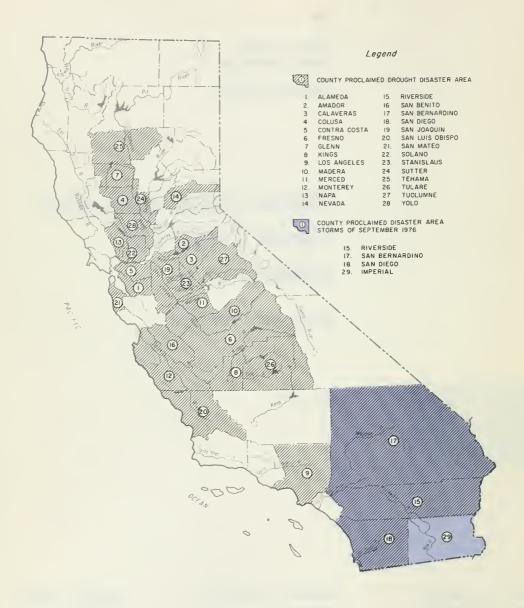
**July 1977** 

Claire T. Dedrick
Secretary for Resources
The Resources
Agency

Edmund G. Brown Jr.
Governor
State of
California

Ronald B. Robie
Director
Department of
Water Resources

# FIGURE 1. COUNTIES PROCLAIMED DISASTER AREAS DURING WATER YEAR 1975-76.



#### FOREWORD

Water year 1975-76 was the third driest year of this century in California. The weather scene was dominated by a persistent high pressure ridge in the atmosphere off the California coast. This blocking high displaced the storm track northward of its usual winter path over California, leaving most of the State deficient in precipitation, runoff, and reservoir storage; and almost devoid of flood events. Ironically, the year also brought the first tropical storm in 30 years to the State. During the water year (October 1, 1975 - September 30, 1976), 28 counties were declared drought disaster areas, and 4 counties were declared flood disaster areas; 3 counties were affected by both disasters.

The incidence of heavy rains in the late summer of a critical drought year emphasizes the fact that we can only control nature to a limited extent. Our continuing water planning efforts must recognize natural limitations.

Bulletin No. 202-76 is the first of an annual series combining information on general statewide water conditions (formerly reported in the water year summary report of Bulletin No. 120, "Water Conditions in California"), and significant high water events of the year (formerly reported in the Bulletin No. 69 series, "California High Water") both of which are being discontinued. The monthly issues, February through May, and the Basic Data Supplement issue of the Bulletin No. 120 series will continue to be published in their present form.

Bulletin No. 202 includes descriptions of weather patterns preceding and during significant storm periods; information on precipitation, snow pack, unimpaired runoff, and reservoir storage; and hydrographs of stream stages and reservoir operations, weir overflow graphs, and tabulation of peak streamflow and stages.

This report was prepared from information supplied by the Department of Water Resources, National Weather Service, U. S. Geological Survey, U. S. Army Corps of Engineers, U. S. Bureau of Reclamation, and many other agencies, public and private. The assistance of all cooperating agencies is greatly appreciated.

Ronald B. Robie, Director Department of Water Resources The Resources Agency State of California Copies of this bulletin are available without charge fram:

State of California
DEPARTMENT OF WATER RESOURCES
P.O. Box 388
Sacramenta, California 95802

#### CONTENTS

	Page										
FOREWORD	iii										
ORGANIZATION, DEPARTMENT OF WATER RESOURCES	vii										
CONVERSION FACTORS - ENGLISH TO METRIC SYSTEM MEASUREMENT vi											
CHAPTER I. WEATHER	1										
CHAPTER II. WATER SUPPLY	19 19 26 27 29										
CHAPTER III. FLOOD EVENTS	31										
APPENDIXES											
Appendix A: Sacramento River Crest and Weir Overflow Records (Figures)	43 44 45 46 47 48 49 50 51 51 52 54 58										
South Coastal Area	60 64 74 74										
FIGURES											
Counties Proclaimed Disaster Areas During Water Year 1975-76	ii ix x										
beptember 30, 1970	- A										

### CONTENTS (Continued)

### FIGURES (Continued)

		Page
4	7-Day Precipitation, Feb. 4-10, 1976, South Coastal Area	2
5	Water Year Precipitation in Percent of Normal, October 1, 1975 - September 30, 1976	4
6	Satellite Photo of Tropical Storm Kathleen,	7
-	September 9, 1976	6 7
7 8	Track of Tropical Storm Kathleen, September 1976 Satellite Photo of Tropical Storm Kathleen,	,
	September 10, 1976	8
9	Pressure Departure and Storm Track, Fall 1975 (Sept., Oct., Nov.)	10
10	Pressure Departure and Storm Track, Winter 1976	
11	(Dec., Jan., Feb.)	10
11	(Mar., Apr., May)	11
12	Seasonal Precipitation in Percent of Normal, October 1975 - April 1976	12
13	Precipitation Accumulation at Selected	
1.4	Stations, October 1975 - April 1976	13 14
14 15	Annual Variation in Precipitation at Selected Cities Water Content of Snowpack Accumulation, in Percent	14
	of April 1 Average	16
16 17	Snowpack in Percent of Average, April 1, 1976 Unimpaired Runoff, 1975-76	17 18
18	Annual Unimpaired Basin Runoff Above Selected Stations .	22
19	Water Transfers and Outflow, 1975-76	28
20	Southern California Reference Map for September 1976 Storm Damage	34
21	Northern California Reference Map	
	For Hydrographs, Figures 22-25	36
22	Hydrographs of Smith, Trinity, and Klamath Rivers	
23 24	Hydrographs of Van Duzen, Eel, and Russian Rivers Hydrographs of Shasta Lake and Sacramento River	40
25	Hydrographs of Lake Oroville, Folsom Lake and	
	Sacramento River	41
	TABLES	
1	Maximum Precipiation Amounts at Selected Stations,	
2	South Coastal Storm of February 4-10, 1976	3
2	Precipitation Amounts at Selected Stations During Water Year 1975-76	5
3	Water Year 1975-76	20
4	Storage in Major Reservoirs	24
5 6	Summary of Reservoir Storage Data, 1975-1976 Comparisons of Water Supply Forecasts with Observed	26
0	Unimpaired Runoff	27

# State of California EDMUND G. BROWN JR., Governor

# The Resources Agency CLAIRE T. DEDRICK, Secretary for Resources

# DEPARTMENT OF WATER RESOURCES RONALD B. ROBIE, Director

ROBIN R. REYNOLDS Deputy Director GERALD H. MERAL Deputy Director ROBERT W. JAMES
Deputy Director

CHARLES R. SHOEMAKER Assistant Director

DIVISION OF PLANNING HERBERT W. GREYDANUS . . . This Bulletin was prepared under the direction of DONALD H. NEUDECK . . . . . . Chief, Flood Operations Branch ALVIN J. BROWN. . . . . . . . . . . . Chief, Snow Surveys Branch by WILLIAM ARVOLA . . . . . . Senior Meteorologist, Water Resources CHARLES H. HOWARD. . . . . Associate Engineer, Water Resources Assisted by William G. T. Fong . . . . . . . Water Resources Technician I William B. Chan. . . . . . . . . . . . . . . Assistant Engineer, Water Resources George W. Patrick. . . . . . Data Programmer II, Water Resources Jess C. Bringham . . . . . . Data Programmer II, Water Resources Deon Lightfoot . . . . . . . . . . . . . . Senior Stenographer Drafting under the direction of

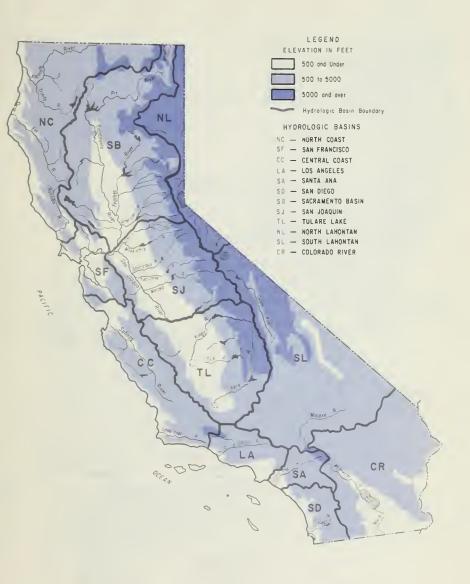
PAULINE D. JOE . . . . . . Senior Delineator, Water Resources

### CONVERSION FACTORS

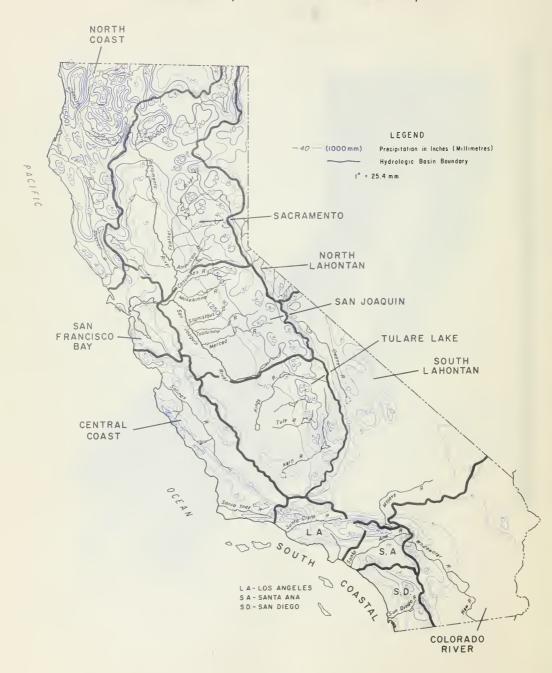
#### English to Metric System of Measurement

Quantity	English unit	Multiply by	To get metric equivalent
Length	inches (in)	25.4	millimetres (mm)
		.0254	metres (m)
	feet (ft)	.3048	metres (m)
	miles (mi)	1.6093	kilometres (km)
Area	square inches (in <sup>2</sup> )	6.4516 × 10 <sup>-4</sup>	square metres (m <sup>2</sup> )
	square feet (It2)	.092903	square metres (m <sup>2</sup> )
	acres	4046.9	square metres (m <sup>2</sup> )
		.40469	hectares (ha)
		.40469	square hectometres (hm²)
		.0040469	square kilometres (km²)
	square miles (mi <sup>2</sup> )	2.590	square kilometres (km²)
Volume	gallons (gal)	3.7854	litres (1)
		.0037854	cubic metres (m <sup>3</sup> )
	million gallons (10 <sup>6</sup> gal)	3785.4	cubic metres (m <sup>3</sup> )
	cubic feet (ft3)	.028317	cubic metres (m <sup>3</sup> )
	cubic yards (yd³)	.76455	cubic metres (m <sup>3</sup> )
	acre-feet (ac-ft)	1233.5	cubic metres (m <sup>3</sup> )
		.0012335	cubic hectometres (hm <sup>3</sup> )
		1.233 × 10 <sup>-6</sup>	cubic kilometres (km <sup>3</sup> )
Volume/Time			
(Flow)	cubic feet per second (ft 3 s)	28.317	litres per second (1 s)
		.028317	cubic metres per second (m <sup>3</sup> s)
	gallons per minute (gal/min)	.06309	litres per second (1 s)
		6.309 × 10 <sup>-5</sup>	cubic metres per second (m3 s)
	million gallons per day (mgd)	.043813	cubic metres per second (m <sup>3</sup> s)
Mass	pounds (lb)	.45359	kilograms (kg)
	tons (short, 2.000 lb)	.90718	tonne (t)
		907.18	kilograms (kg)
Power	horsepower (hp)	0.7460	kilowatts (kW)
Pressure	pounds per square inch (psi)	6894.8	pascal (Pa
Temperature	Degrees Fahrenheit (F)	$\frac{tF - 32}{1.8} = tC$	Degrees Celsius (C)

### FIGURE 2. HYDROLOGIC BASINS OF CALIFORNIA



# FIGURE 3. WATER YEAR PRECIPITATION IN INCHES (MILLIMETRES) OCTOBER 1, 1975 — SEPTEMBER 30, 1976



#### CHAPTER I. WEATHER

The water year 1976 was a record dry one -- one of the driest in the century. The water year precipitation (October 1, 1975 - September 30, 1976) at many stations ranked as the first, second, or third driest of record. The overall impact of the drought made the year comparable to the dry year of 1924.

The usual weather pattern in the eastern Pacific is an area of high pressure in the atmosphere off the California coast and a low-pressure area near the Aleutian Islands. The high-pressure area usually weakens and shifts south to about 30° latitude in the fall, and the pressure falls even lower in the area near the Aleutians. This permits storms to come into California from the Pacific. This trend began in October 1975 and the month ended with above normal precipitation in California. However, in November the situation changed. The Pacific highpressure area became stronger and moved north to about its summer position, and the storms were deflected north of the high-pressure area into Oregon and Washington, causing severe flooding. Those storm fronts that entered California in November were so weak that precipitation amounts were light.

This strong high-pressure cell in the atmosphere continued in this northerly location through December, January, and February. The storm track during January was about 800 kilometres (500 miles) further north than usual.

# FIGURE 4. 7-DAY PRECIPITATION FEBRUARY 4-10, 1976, SOUTH COASTAL AREA



There was a temporary weakening of the high-pressure area during early February, resulting in moderate precipitation in Northern California and rather heavy precipitation in Southern California.

Short-period rainfall amounts established new records in some Southern California stations; for example, on February 8, 1976, at the station in the San Gabriel Mountains known as Haines Canyon-Upper, 53 millimetres (2.1 inches) of rain fell in five minutes. This is a new record for a five-minute period in California.

TABLE 1. MAXIMUM PRECIPITATION AMOUNTS AT SELECTED STATIONS SOUTH COASTAL STORM OF FEBRUARY 4 - 10, 1976

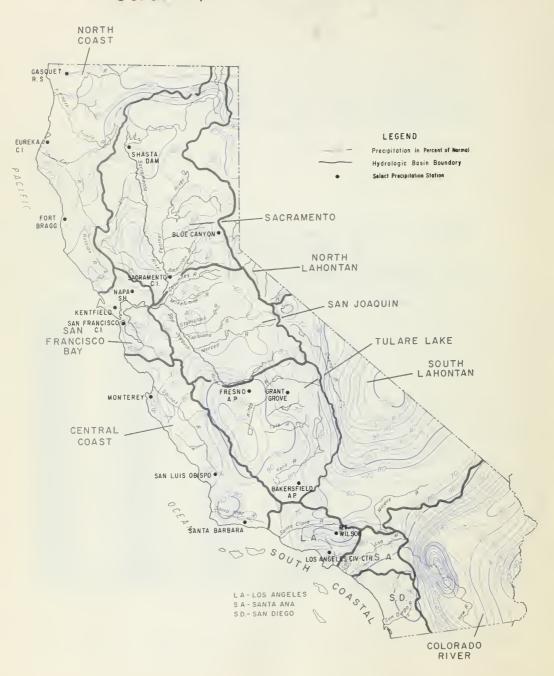
STATION	COUNTY	ELEVATION feet (metres)			IMUM TOTAL (milli- metres)		XIMUM Y TOTAL (milli- metres)		TORM Y TOTAL (milli- metres)
Big Pines Park FC	Los Angeles	6,862	(2,093)	2.3	( 58)	5.3	(135)	9.0	(229)
Big Tujunga Dam FC	Los Angeles	2,317	(706.7)	2.9	( 74)	5.0	(127)	9.3	(236)
Camp Hi Hill Opids	Los Angeles	4,250	(1,296)	3.1	( 79)	7.4	(188)	12.2	(310)
Colbys FC	Los Angeles	3,675	(1,121)	3.6	(91)	6.4	(163)	10.0	(254)
Crystal Lake FC	Los Angeles	5,370	(1,638)	4.1	(104)	6.9	(175)	10.4	(264)
Cuyamaca	San Diego	4,640	(1,415)	3.5	( 89)	7.2	(183)	11.1	(282)
Gibraltar Dam	Santa Barbara	1,550	(472.8)	3.0	( 76)	6.8	(173)	10.8	(274)
Haines Canyon Upper	Los Angeles	3,440	(1,049)	3.2*	(81)	6.7	(170)	11.1	(282)
Hoegees FC	Los Angeles	2,650	(808.2)	3.2	( 81)	5.3	(135)	8.7	(221)
Juncal Dam	Santa Barbara	2,075	(632.9)	3.5	(89)	6.9	(175)	12.5	(318)
Lake Arrowhead	San Bernardino	5,205	(1,588)	3.5	( 89)	6.9	(175)	12.9	(328)
Lytle Creek RS	San Bernardino	2,730	(832.6)	4.8	(122)	7.6	(193)	13.7	(348)
Mt. Baldy FC	San Bernardino	4,257	(1,304)	3.9	( 99)	9.0	(229)	12.9	(328)
Mt. Wilson 2	Los Angeles	5,709	(1,741)	5.5	(140)	10.2	(259)	15.2	(386)
Palomar MT. OBS.	San Diego	5,550	(1,693)	3.2	( 81)	5.9	(150)	11.1	(282)

\*The previous maximum intensity of record for the State was surpassed when 2.1 inches of rain fell within a 5-minute period between 3:00 p.m. and 3:05 p.m. on February 8, 1976.

#### Metric Equivalents:

<sup>1</sup> inch = 25.4 millimetres (mm)
1 foot = 0.305 metre (m)

FIGURE 5. WATER YEAR PRECIPITATION IN PERCENT OF NORMAL OCTOBER 1, 1975 — SEPTEMBER 30, 1976



The spring months did not provide enough precipitation to compensate for the deficiencies of the winter months. March precipitation continued below normal; The precipitation in April was above normal for that month, but normal April precipitation is not impressively large. One of the more significant benefits of the above-normal April precipitation was to provide adequate water for wildlife in the interior desert areas of Southern California.

TABLE 2. PRECIPITATION AMOUNTS AT SELECTED STATIONS
DURING WATER YEAR 1975 - 76

HYDROLOGIC BASIN	ELEVA	TION		PRECIPITATION FOR SELECTED PERIODS					MAXIMUM ONE-DAY AMOUNTS		
			C	ctober 19		F	ebruary :				
Station	feet	metres	inches		Percent Normal	inches	(milli- metres)	Percent Normal	Date	inches	(milli- metres)
NORTH COAST Gasquet RS Eureka CI Fort Bragg	384 43 80	(117) (13) (24)	13.0 6.8 4.7	(330) (172) (120)	174 210 159	12.4 7.5 7.6	(315) (190) (193)	103 146 135	1/8 10/25 10/26	2.8 2.8 2.0	( 71) ( 71) ( 51)
SACRAMENTO Shasta Dam Blue Canyon Sacramento CI	1076 5280 19	(328.2) (1610) (5.8)	7.8 9.7 2.3	(198) (246) (58)	209 234 230	9.2 7.6 1.5	(234) (193) (38)	104 80 52	2/26 10/26 10/9	3.5 3.0 0.7	( 89) ( 76) ( 18)
SAN JOAQUIN Fresno AP	328	(100)	1.1	( 28)	255	4.7	(119)	274	2/9	1.5	( 38)
TULARE LAKE Grant Grove Bakersfield	6600 475	(2013) (145)	6.2 0.5	(157) (13)	421 185	5.6 1.6	(142) ( 41)	78 198	9/11 2/6	3.1	( 79) ( 15)
SAN FRANCISCO BAY Napa State Hospital Kentfield San Francisco CI	60 128 52	(18) (39.0) (16)	3.6 5.5 2.4	(91) (140) (61)	230 189 230	2.0 5.7 1.8	( 51) (145) ( 46)	53 76 62	3/2 2/29 2/29	1.4 3.6 0.8	( 36) ( 91) ( 20)
CENTRAL COAST  Monterey San Luis Obispo Santa Barbara	345 315 5	(105) (96.1) (1.5)	1.7 2.2 0.03	( 43) ( 56) ( 1)	- 323 08	3.0 4.2 5.6	(76) (107) (142)	- 104 165	9/11 9/11 2/9	1.9 1.7 2.4	( 48) ( 44) ( 61)
SOUTH COASTAL AREA* Mt. Wilson 2 Los Angeles CC San Diego AP	5709 270 13	(1741) (82.4) (4.0)	0.9 0.3 0.1	( 23) ( 07) ( 02)	100 100 26	15.3 3.7 5.4	(389) (94) (137)	253 134 365	2/9 9/10 2/8	5.5 1.7 1.7	(140) ( 44) ( 43)
NORTH LAHONTON Susanville AP	4146	(1265)	1.5	( 38)	130	0.3	( 08)	17	9/11	0.6	(14)
SOUTH LAHONTON Bishop AP Barstow	4108 2160	(1253) (658.8)	0.1 T	( 02) ( T )	35 0	1.4	( 35)	129 160	2/6 9/10	0.7	(18)
COLORADO RIVER Palm Springs Imperial	425 64	(130) (20)	0.02	(0.5)	10	2.6	( 66) ( 21)	392 382	9/10 9/10	2.8	( 70) ( 60)

<sup>\*</sup> South Coastal area includes the Los Angeles, Santa Ana, and San Diego Hydrologic Basins.

Metric Equivalents:

l inch = 25.4 millimetres (mm) l foot = 0.305 metre (m)

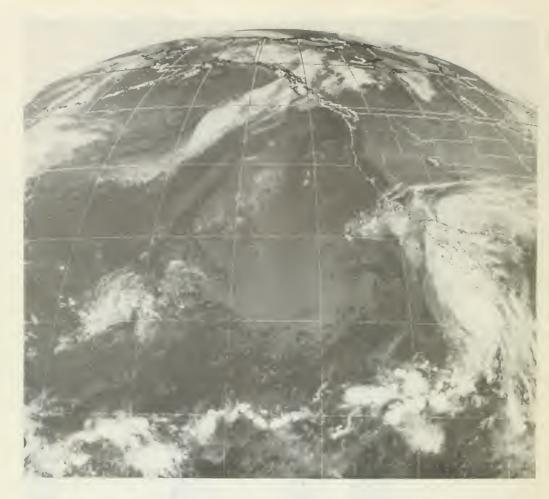


FIGURE 6. SATELLITE PHOTO OF TROPICAL STORM KATHLEEN, SEPTEMBER 9, 1976.

Satellite SMS-2 infrared picture taken on September 9, 1976, at 1145 GMT or 0445 PDT. This infrared picture shows "Kathleen" located near the tip of Baja, California.

The sensing element aboard the satellite is a radiometer, which measures radiation from the various cloud layers. Cold clouds, such as cirrus and cirrostratus, appear white; whereas warmer cloud layers, such as stratus and stratocumulus, appear as a greyish hue.

California was visited by a tropical storm in early September - the first storm system of this type since the one in September 1939. This year's tropical storm, named "Kathleen", was formed on September 7 in the Pacific Ocean west of Mexico south of 20° north latitude. Initially, Kathleen drifted westward, but on the morning of September 9, near the tip of Baja California, the track assumed an orientation toward north northwest. The track of Kathleen (taken from the National Meteorological Center weather maps) is shown in Figure 7. Late on September 9, as Kathleen was crossing the 20° latitude circle, the winds near the storm exceeded 120 kilometres per hour (75 miles per hour), and Kathleen was classified for a short time as a hurricane. Subsequently, about 6 hours later, as the winds decreased to less than 120 kmph (75 mph), Kathleen was downgraded to the "tropical storm" category. A satellite picture of "Kathleen" is shown in Figure 6 at the time when she was located near the tip of Baja California on the morning of September 9.

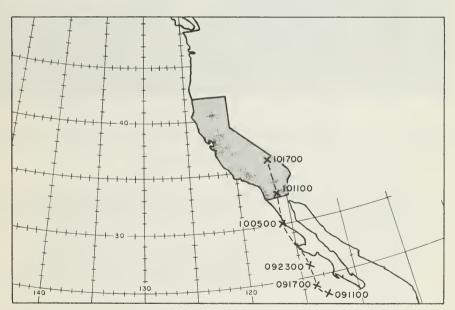


FIGURE 7. TRACK OF TROPICAL STORM KATHLEEN, SEPTEMBER, 1976.

CROSSES LOCATE THE 6-HOURLY POSITIONS OF THE CENTER OF THE STORM. THE NUMBERS REFER TO THE DATE AND TIME. (PDT)



FIGURE 8. SATELLITE PHOTO OF TROPICAL STORM KATHLEEN,
SEPTEMBER 10, 1976

Satellite SMS-2 infrared picture taken on September 10, 1976, at 1915 GMT (1215 PDT). At that time the center of lowest pressure was located near the Mexican-California border near El Centro.

The picture shows the extent of cloudiness associated with Tropical Storm "Kathleen". The area of precipitation by this time had extended northward to a line extending approximately from Paso Robles through Fresno to Bishop.

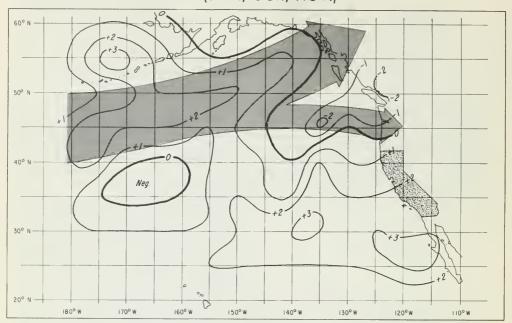
As the hurricane moved inland, the pressure at the center increased, and the cyclonic circulation was diminished due to the friction over mountainous terrain.

The center of Kathleen passed inland on the morning of September 10 at a point in Baja California south of Kathleen carried a substantial charge of Ensenada. moisture and brought heavy precipitation to Southern California and the desert area of southeastern The heaviest precipitation fell on California. September 10 with total storm amounts varying from 250 to 280 millimetres (10 to 11 inches) in the mountains of Southern California, 50 to 75 mm (2 to 3 inches) in the desert areas, and 25 to 50 mm (1 to 2 inches) in coastal plains. Even the Sierra Nevada benefited from Kathleen's precipitation, with 25 to 125 mm (1 to 5 inches) falling in the basins from the Feather River south to the Kern River. A second satellite picture, taken during the heaviest precipitation in Southern California, is shown in Figure 8.

In the latter half of September, two additional weather patterns brought unusually early autumn precipitation to the southern half of the State. On September 23-24 an upper level atmospheric low pressure area located offshore southwest of Los Angeles, brought a southwest current of tropical air over the desert area of southeastern California. Showers and thundershowers resulted in localized flooding. Amounts varied from about 13 mm (one half inch) in some localities to near 50 mm (2 inches) at Thermal in the Coachella Valley.

At the end of the month, on September 29-30, another upper level low was located offshore about 555 kilometres (300 nautical miles) west of Santa Barbara. This storm brought a stream of tropical air over the San Joaquin, Salinas, and Santa Clara Valleys. unstable character of the air mass brought showery precipitation, with 2-day amounts up to 50 mm (2 inches) in the area between Point Mugu and Salinas, and accumulations near 25-50 mm (1 to 2 inches) near Taft and McKittrick in the southern end of the San Joaquin Valley and further north near Mendota, west of Fresno. Since much of the precipitation was associated with thunderstorms, intense rates of precipitation were reported on the west side of the San Joaquin Valley (Mendota to Los Banos) and also in the Hollister area of the Santa Clara Valley. Rates of 25 mm (one inch) in one half hour were reported by observers. The storm amounts in the southern Sierra Nevada were also substantial, with some stations in the Kaweah-Tule-Kern drainage area having totals between 100 and 125 millimetres (4 and 5 inches).

FIGURE 9. PRESSURE DEPARTURE AND STORM TRACK, FALL 1975 (SEPT., OCT., NOV.)



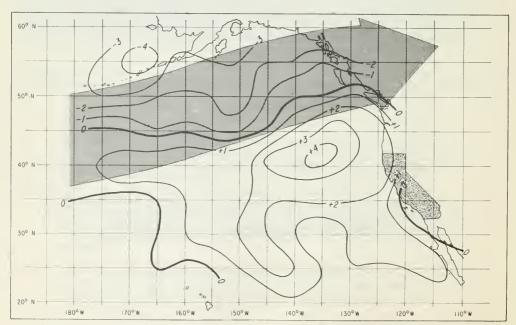
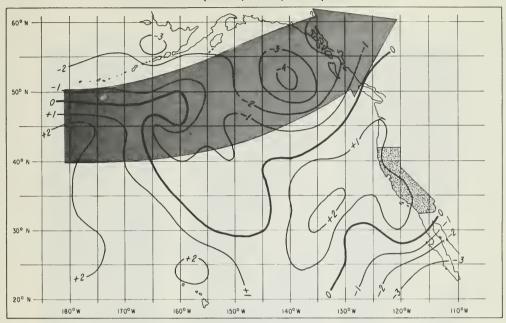


FIGURE 10. PRESSURE DEPARTURE AND STORM TRACK, WINTER 1976 (DEC., JAN., FEB.)

FIGURE 11. PRESSURE DEPARTURE AND STORM TRACK, SPRING 1976
(MAR., APR., MAY)



THESE MAPS ILLUSTRATE THE PERSISTENCE OF ABOVE-NORMAL PRESSURE IN THE REGION WEST OF THE CALIFORNIA COAST, ESPECIALLY IN THE WINTER AND SPRING SEASONS.

ABOVE NORMAL PRESSURE OFFSHORE IN THE 1975-76 WATER YEAR MEANT THE ABSENCE OF STORM SYSTEMS OR THE WEAKENING OF THOSE STORMS WHICH DID MOVE INTO THE AREA.

### Legend

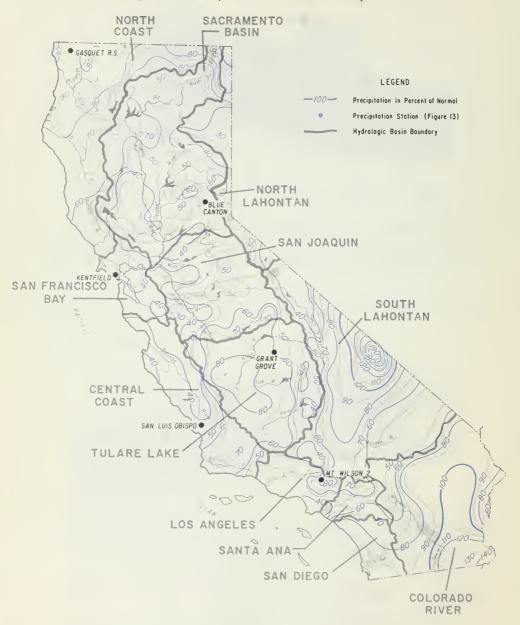
Figures 9, 10, & 11 show the departure-from-normal, in millibars, of the atmospheric sea-level pressure during three seasons. The isopleths are drawn at 1-millibar intervals and are labeled either positive or negative. The zero departure is the heavy line.



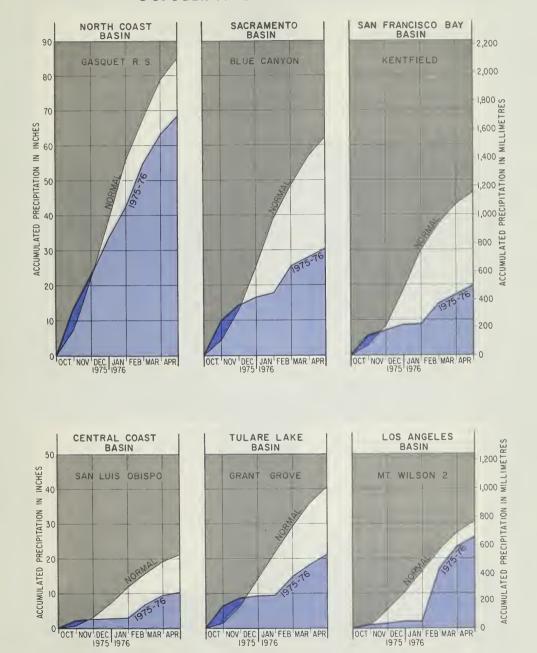
The stippled areas designate the general storm track during each season

1 millibar is equivalent to 0.75 millimetres or 0.03 inches of mercury, and is also equivalent to 100 pascals (the S. I. metric unit of pressure).

# FIGURE 12. SEASONAL PRECIPITATION IN PERCENT OF NORMAL OCTOBER 1, 1975 — APRIL 30, 1976



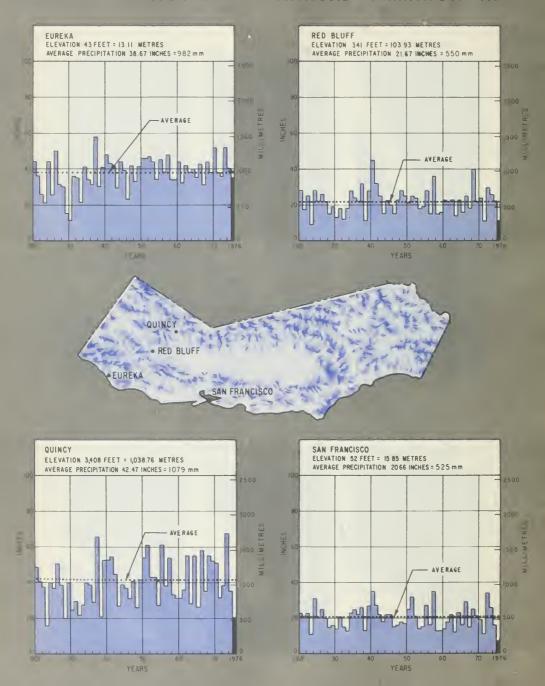
## FIGURE 13. PRECIPITATION ACCUMULATION AT SELECTED STATIONS. OCTOBER 1975 - APRIL 1976.



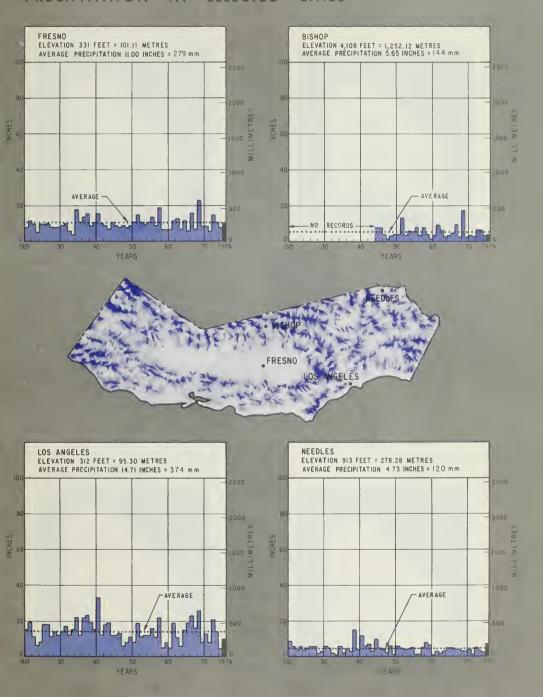
NOV DEC JAN FEB MAR APR

OCT

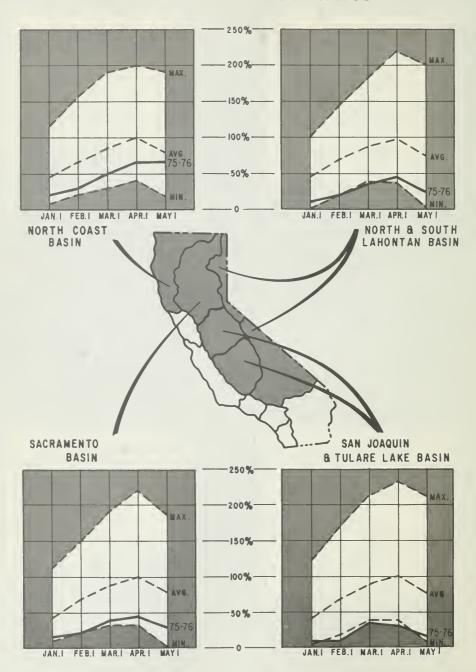
OCT NOV DEC JAN FEB MAR APR 1975 1976



### PRECIPITATION AT SELECTED CITIES



# FIGURE 15. WATER CONTENT OF SNOWPACK ACCUMULATION, IN PERCENT OF APRIL 1 AVERAGE



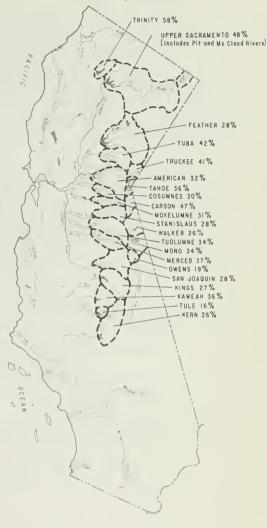
The low precipitation in November, December, and January was reflected in the winter snowpack accumulation which was less than 50 percent of normal on February 1, 1976. Conditions at that time indicated that about 250 percent of normal February and March snow accumulation would have been needed to produce a normal April 1 snowpack. Such was not the case, however, as February and March continued the winter drought, and by April 1 the snowpack was only about 40 percent of normal, with snowpack water content the lowest of record at about one-third of the State's snow courses.

Data from the remote snow sensor network in the Sierra Nevada indicated that the peak snow accumulation had occurred about mid-March and snowmelt had then begun, about a month earlier than usual. By May 1, the overall snowpack water content had decreased to about 35 percent of average, and about onethird of the snow courses measured were already bare. Snowpack water content averaged only about 40 percent of normal in Sacramento Valley watersheds, and about 25 percent of normal in San Joaquin Valley watersheds. NASA satellite imagery indicated the effective snow line elevation on May 1 averaged about 2 530 metres (8,300 feet), and that the combined snowcovered area of the San Joaquin, Kings, Kaweah, Tule, and Kern River Basins was 5 200 square kilometres (2,000 square miles) this year, compared to 9 500 square kilometres (3,650 square miles) of snowcovered area on May 1 last year.

April 1 snowpack, in percent of average for individual river basins, is depicted in Figure 16, and seasonal snowpack accumulation curves are shown in Figure 15.

# FIGURE 16. SNOWPACK IN PERCENT OF AVERAGE

**APRIL 1, 1976** 



Legend

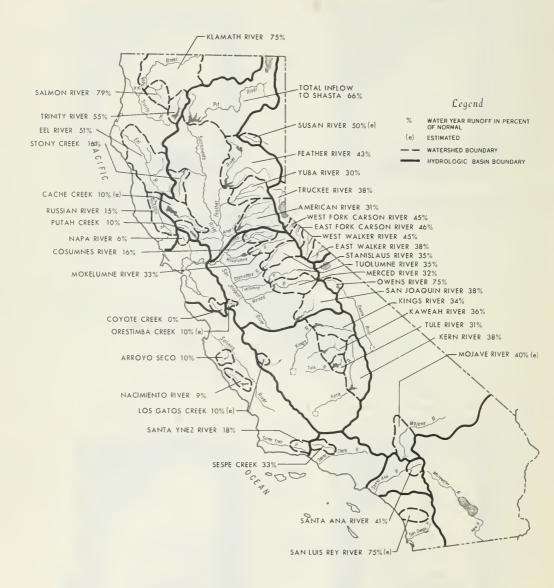
% WATER EQUIVALENT IN PERCENT OF AVERAGE

--- WATERSHED BOUNDARY



### FIGURE 17. UNIMPAIRED RUNOFF, 1975-76

### WATER YEAR OCTOBER 1 - SEPTEMBER 30



### CHAPTER II. WATER SUPPLY

#### UNIMPAIRED RUNOFF

Unimpaired runoff during the 1975-76 water year was well below average in all major hydrologic basins of the State, following the very dry pattern established by the low precipitation and snowpack accumulation. Values ranged from a scant 5 to 10 percent of normal in the San Francisco Bay and Central Coast Basins, to 60 percent in the North Coast Basin. Streamflow from the Central Valley, the major agricultural water-producing area of the State, and from the Lahontan and South Coastal Areas was in the 35 to 45 percent range. Cverall, the statewide average amounted to only about 50 percent of normal. Water year percentages for these major hydrologic basins are listed in the table below.

April-July snowmelt runoff percentages were generally slightly lower than those for the total water year runoff, primarily because most streams had above-normal flows for about the first two months of the water year. These higher flows receded to much lower levels during the dry winter and spring period, however, and remained there during the snowmelt season because of the sparse snowpack. April-July runoff percentages varied from 11 percent of normal on the East Walker River to 64 percent in the drainage area above Shasta Dam with most values in the 25 to 35 percent range.

Detailed data for individual streams are shown in Figure . 17 and Table 3, and annual variation in runoff since 1921 for eight streams is shown in Figure 18.

#### UNIMPAIRED RUNOFF BY AREA

HYDROLOGIC BASIN	WATER YEAR UNIMPAIRED FLOW IN PERCENT OF NORMAL
North Coast San Francisco Bay Central Coast South Coastal Area (1)	60 5 10 45
Central Valley Area Sacramento San Joaquin and Tulare Lake	45 35
Lahontan Area (2) ENTIRE STATE	45

- (1) Includes Los Angeles, Santa Ana, and San Diego Basins.
- (2) Includes North and South Lahontan Basins.

## TABLE 3. STREAMFLOW DATA FOR SELECTED STREAMS (ENGLISH UNITS)

	,	SHOWNELT P LPRIL 1, 1976 -		OCTOBER 1, 1975 - SEPTEMBER 30, 1976				
BASIN, STROM, AND STATION	HEASURES L	UNITED	IRED RUMOFF (	MEASURED	UM (HIPA	IRED RUMOFF (2	)	
(1)	FLOW ACRE-FEET	AVERAGE AC-FT (3)	TOTAL ACRE-FEET	OF AVENAGE	FLOW ACRE-FEET	AVENAGE AC-FT (3)	TOTAL ACRE-FEET	OF AVENAGE
(1)		(5)				(5)		
NORTH COAST BASIN								
KLAHATH, COPCO TO ORLEANS (4)					3,160,000 966,000	4,430,000 1,220,000	3,320,000 966,000	75 79
SALHON AT SOMESBAR	34,800	617,000	370,000	60	128,000	1,230,000	672,000	55
TRINITY AT LEWISTON EEL AT SCOTIA	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				2,650,000	5,380,000	2,760,000	51
RUSS IAN NEAR MEALOSBURG					237,000	799,000	120,000	15
SAN FRANCISCO BAY BASIN					3,700	66,500	3,700	6
NAPA NEAR ST. HELENA COYOTE CREEK NEAR MAGRONE					35, 100	45,400	0	ő
COTOTE CREEK NEAK THORONG								
ENTRAL COAST BASIN						100.000		
ARROYO SECO NEAR SOLEOAO					10,800	109,000	10,800	10
NACIMIENTO BELOW NACIMIENTO DAM, NEAR BRADLEY			~		179,000	191,000	17,800	9
SANTA YNEZ ABOVE GIBRALTAR DAH,								
NEAR SANTA BARBARA					5,700	40,800	7,200	18
OS ANGELES BASIN SESPE CREEK NEAR FILLMORE					25, 200(6)	76,900	25,200	33
SESTE CHEEK NEAK FILLHONE					-5,(0)	70, 300	23,200	,,,
SANTA ANA BASIN								
SANTA ANA NEAR MENTONE					31,500(7)	55,000	22,700	41
SAN DIEGO BASIN								
SAN LUIS REY AT OCEANSIDE					6,600	38,200	28,600(5)	75 (5)
SAIL EGIS KET AT GERMATUE					-,	,-,	,(),	,,,,,,
ACRAMENTO BASIN								
INFLOW TO SHASTA (8)	1,140,000	1,780,000	1,140,000	64	3,610,000	5,480,000	3,610,000	66
SACRAMENTO ABOVE BEND BRIDGE,	3,100,000	2,420,000	1,500,000	62	7,770,000	7,950,000	4,850,000	61
NEAR REO BLUFF (9) FEATHER, INFLOW TO OROVILLE	558,000(8)	1,860,000	618,000	33	2,060,000(8)	4,290,000	1,870,000	43
YUBA AT SHARTVILLE (10)	136,000	1,080,000	279,000	26	820,000	2,270,000	690,000	30
AMERICAN, INFLOW TO FOLSOM	306,000(8)	1,320,000	312,000	24	1,360,000(8)	2,570,000	785,000	31
STONY CREEK BELOW BLACK BUTTE DAM					81,900	387,000	62,500	16
CACHE CREEK NEAR CAPAY					(11) 296, 000	515,000 360,000	52,000(5) 34,300	10 (5)
PUTAH CREEK NEAR WINTERS					290,000	300,000	٥٩, ٥٥٥	10
SAN JOAQUIN BASIN								
COSUMNES AT MICHIGAN BAR	16, 900	132,000	15,200	12	54,500	351,000	54,800	16
MOKELUMNE, INFLOW TO PARDEE	62,200	466,000	123,000	26	268,000	705,000	236,000	33
STANISLAUS, INFLOW TO MELONES	1,200	717,000	199,000	28	103,000	1,090,000	377,000	35
TUOLUHNE, INFLOW TO CON PEORO	566,000 357,000	1,190,000 608,000	330,000 168,000	28 28	1,520,000 714,000	1,790,000 920,000	624,000 299,000	35 32
MERCED, INFLOW TO EXCHEQUER ORESTIMBA CREEK NEAR NEWMAN	357,000	000,000	100,000		(11)	10,800	1,100(5)	10 (5)
SAN JOAQUIN, INFLOW TO MILLERTON	238,000(8)	1,190,000	350,000	29	828,000(8)	1,660,000	629,000	38
					, , , , , ,			
TULARE LAKE BASIN	0/5 000	1 1/0 005	202 0	26	500 000	1 570 000	526 000	21.
KINGS, INFLOW TO PINE FLAT	265,000	1,160,000 270,000	303,000 75,200	26 28	599,000 147,000	1,570,000 403,000	536,000 147,000	34 36
LOS GATOS CREEK NEAR COALINGA	75,200	2/0,000	/5,200	20	(11)	3,000	300(5)	10(5
TULE, INFLOW TO SUCCESS	12,600	59,200	12,600	21	41,800	133,000	41,800	31
KERN, INFLOW TO ISABELLA	104,000	420,000	104,000	25	239,000	527,000	239,000	38
DOTH LANGUEAN DAGIN								
NORTH LAHONTAN BASIN SUSAN AT SUSANVILLE					(11)	50,000(5)	25,000(5)	50(5
TRUCKEE, TAHOE TO FARAO (4)	131,000	264,000	70,300	27	249,000	381,000	146,000	38
WEST FORK CARSON AT WOODFORDS	16,700	51,100	16,700	33	31,700	70,100	31,700	45
EAST FORK CARSON NEAR GARONERVILLE	64,300	182,000	64,300	35	115,000	248,000	115,000	46
WEST WALKER BELOW LITTLE WALKER, NEAR COLEVILLE	49,800	143,000	49,800	35	80,300	177,000	80,300	45
EAST WALKER NEAR BRIDGEPORT	34,200	60,300	6,700	35	54,200	106,000	40,200	38
	,,,,,,	00,,50	0,,00		7.1200	, , , , , , ,	,	,,,
SOUTH LAHONTAN BASIN				-1				20
OWENS BELOW LONG VALLEY BAH	104,000	59,500	32,200	54	299,000	142,000	107,000 36,000(5)	75 40(5)
HOJAVE AT BARSTOW					(11)	90,000(5)	30,000(5)	40(5)
COLORAGO RIVER BASIN								
COLORAGO, INFLOW TO LAKE POWELL	4,310,000	7,640,000	5,300,000	69	8,760,000	11,300,000	8,440,000	75

<sup>(1)</sup> RESERVOIR INFLOW DATA ARE BASED ON OBSERVED FLOWS AT STATIONS DOWNSTREAM FROM LISTED FACILITY.
(2) THE UNIMPLAIRED DUNDEF OF A STREAM AT ANY STATION IS THE RUNDEF WHICH MOULD HAVE OCCURAGE DUNDER NATURAL CONDITIONS, UNALTERED BY UPSTREAM DIVERSIONS, STORAGE OVECLOPHENTS, OR 89 EXPORTATION OR IMPORTATION OF WATER TO OR FROM OTHER MATERISHEDS.
(3) AVERAGES ARE COMPUTED FOR THE 50-YEAR PERIOD 1921-70.
(4) ACCRETIONS SETTURES STATIONS.

<sup>(4)</sup> ACCRETIONS BETWEEN STATIONS.
(5) ESTIMATED VALUE.
(6) INCLUDES FILLHORE IRRIGATION COMPANY CANAL.
(7) INCLUDES SOUTHERN CALIFORNIA EDISON COMPANY CANAL.
(8) COMPUTED FROM OPERATING RECORDS — UMADJUSTED FOR UPSTREAH REGULATION.
(9) UNIFRATIRED FLOWS COMPATIBLE TO THOSE AT DISCONTINUED STATION NEAR RED BLUFF.
(10) INCLUDES DEER CREEK.
(11) DATA MOT AVAILABLE AT TIME OF PUBLICATION.

# TABLE 3. STREAMFLOW DATA FOR SELECTED STREAMS (METRIC UNITS)

		SHOWHELT I			OCTOBER 1, 1975 - SEPTEMBER 30, 1976					
BASIN, STREAM, AND STATION	MEASURED FLOW		A JRED RUNOFF (		MEASURED FLOW		AIREO RUNDEF (	2)		
BASIN, SINDAN, AND SINITON	CUBIC	50-YR AVG (3)	PERIOD TOTAL CUBIC	PERCENT	CUBIC	50-YR AVG (3) CUBIC	ANNUAL TOTAL CUBIC	OF		
(1)	HECTOMETRES	CUBIC HECTOMETRES	HECTOMETRES	AVENAGE	HECTOHETRES	HECTOMETRES	HECTOMETRES	AVERAGE		
NORTH COAST BASIN KLAMATH, COPCO TO ORLEANS (4)					3 900	5 460	4 100	75		
SALMON AT SOMESBAR				77	1 190	1 510	1 190	79		
TRINITY AT LEWISTON	43	761	456	60	158 3 270	1 520 6 640	829 3 400	55 51		
EEL AT SCOTIA RUSSIAN NEAR HEALOSBURG					292	986	148	15		
NAPA NEAR ST. HELENA					5	82	5	6		
COYOTE CREEK NEAR MADRONE				~-	43	56	0	0		
ARROYO SECO NEAR SOLEDAD			~~~		13	134	13	10		
NACIMIENTO BELOW NACIMIENTO DAM,					221	236	22	9		
NEAR BRAOLEY SANTA YNEZ ABOVE GIBRALTAR DAM,					221					
NEAR SANTA BARBARA					7	50	9	18		
LOS ANGELES BASIN										
SESPE CREEK NEAR FILLHORE					31(6)	95	31	33		
SANTA ANA BAS IN SANTA ANA NEAR MENTONE					39(7)	68	28	41		
								'		
SAN DIEGO BASIN SAN LUIS REY AT OCEANSIDE					8	47	35(5)	75(5)		
SACRAMENTO BASIN	1 410	2 200	1 400	64	4 450	6 760	4 450	66		
INFLOW TO SHASTA (8) SACRAMENTO ABOVE BENO BRIDGE,							E 000	61		
NEAR REO BLUFF (9)	3 820	2 990	1 850 762	62 33	9 580 2 540(8)	9 810 5 290	5 980 2 310	43		
FEATHER, INFLOW TO OROVILLE YUBA AT SMARTVILLE (10)	688(8) 168	2 290 1 330	344	26	1 010	2 800	851	30		
AMERICAN, INFLOW TO FOLSOM	377 (8)	1 630	385	24	1 680(8)	3 170	968	31 16		
STONY CREEK BELOW BLACK BUTTE DAM					101 (11)	477 635	77 64(5)	10(5)		
PUTAH CREEK NEAR CAPAY PUTAH CREEK NEAR WINTERS					365	لبلبل	42	10		
COSUMNES AT HICHIGAN BAR	21	163	19	12	67	433	68	16		
MOKELUMNE, INFLOW TO PAROEE	77	575 884	152 245	26 28	331 127	870 1 340	291 465	33 35		
STANISLAUS, INFLOW TO MELONES TUOLUMNE, INFLOW TO OON PEORO	698	1 470	407	28	1 870	2 210	770	35		
HERCEO, INFLOW TO EXCHEQUER	440	750	207	28	881	1 130	369	32		
ORESTIMBA CREEK NEAR NEWMAN	294(8)	1 470	432	29	(11)	13 2 050	1 (5) 776	10(5) 38		
SAN JOAQUIN, INFLOW TO MILLERTON	254(0)	1 4/0	*,7*		,(0,					
TULARE LAKE BASIN					700	1 940	661	34		
KINGS, INFLOW TO PINE FLAT KAWEAH, INFLOW TO TERHINUS	327 93	1 430 333	374 93	26 28	739 181	497	181	36		
LOS GATOS CREEK NEAR COALINGA					(11)	4	0.4(5)	10(5)		
TULE, INFLOW TO SUCCESS KERN, INFLOW TO ISABELLA	16	73	16 128	21 25	52 295	164 773	52 295	31 38		
KERN, INFLOW TO ISABELDA	128	518	120	25	233	113	-/-	-		
NORTH LAHONTAN BASIN					(11)	62(5)	31(5)	50(5)		
SUSAN AT SUSANVILLE TRUCKEE, TAHOE TO FARAO (4)	162	326	87	27	307	470	180	38		
WEST FORK CARSON AT WOODFORDS	21	63	21	33	39	86	39	45		
EAST FORK CARSON NEAR GARONERVILLE WEST WALKER BELOW LITTLE WALKER.	79	225	79	35	142	306	142	46		
NEAR COLEVILLE	61	176	61	35	99	218	99	45		
EAST WALKER NEAR BRIDGEPORT	42	74	8	11	67	131	50	38		
SOUTH LAHONTAN BASIN							100	7.5		
OWENS BELOW LONG VALLEY DAM	128	73	40	54	369 (11)	175 111(5)	132 44(5)	75 40(5)		
MOJAVE AT BARSTOW					(11)	111(2)	(5)			
COLORADO RIVER BASIN			( rhe	(0	10 800	13 900	10 400	75		
COLORADO, INFLOW TO LAKE POWELL	5 320	9 420	6 540	69	10 000	13 900	10 400	,,		

<sup>(1)</sup> RESERVOIR INFLOW DATA ARE BASED DN OBSERVED FLOWS AT STATIONS DOWNSTREAM FROM LISTED FACILITY.

(2) THE UNIMPAIRED RUNOFF OF A STREAM AT ANY STATION IS THE RUNOFF WHICH WOULD HAVE OCCURRED UNDER HATURAL COMDITIONS, UNALTERED BY UPSTREAM DIVERSIONS, STORAGE DEVELOPMENTS, OR BY EXPORTATION OR IMPORTATION OF WATER TO OR FROM OTHER WATERSHEDS.

(3) AVERAGES ARE COMPUTED FOR THE 50-YEAR PERIOD 1921-70.

(4) ACCEPTIONS DETWEEN STATIONS.

(5) STATUTE STRUCKER STRICTION COMPANY CAMAL.

(7) INCLUDES SOUTHERN CALIFORNIA FOISON COMPANY CAMAL.

(8) COMPUTED FROM OPERATING RECORDS — UNADJUSTED FOR UPSTREAM REGULATION.

(9) UNIMPAIRED FLOWS COMPATIBLE TO THOSE AT DISCONTINUED STATION MEAR RED BLUFF.

ACCRETIONS DELYCENT STATIONS.

SET INATED VALUE.

INCLUDES FILLMORE INGATION COMPANY CAMAL.

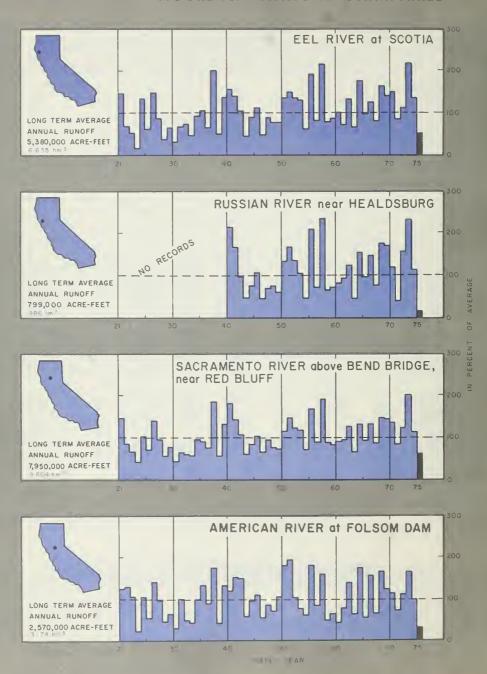
INCLUDES SOUTHERN CALIFORNIA EDISON COMPANY CAMAL.

COMPUTED FROM PERSATING RECORDS -- UNAQUISTED FOR UPSTREAM REGULATION.

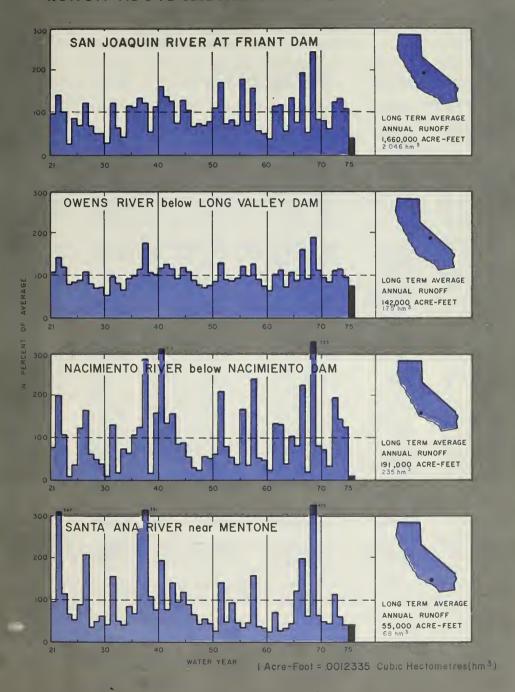
UNIMPRIEDE FLOWS COMPATIBLE TO THOSE AT DISCONTINUED STATION NEAR RED BLUFF.

<sup>(10)</sup> INCLUDES DEER CREEK.
(11) DATA NOT AVAILABLE AT TIME OF PUBLICATION.

### FIGURE 18. ANNUAL UNIMPAIRED



### RUNOFF ABOVE SELECTED STATIONS



### TABLE 4. STORAGE IN MAJOR RESERVOIRS (ENGLISH UNITS)

	Г		CAPAC ITY	STORAGE AS	OF OCTOBER	1 1000 ACR	E-EET (1)
HYDROLOGIC BASIN	RESERVOIR	OPERATOR	1000	10-YEAR AVERAGE			PERCENT
AND STREAM			ACRE-FEET	1966-1975	1975	1976	DF AVERAGE
NORTH COAST BASIN							
KLAHATH RIVER	UPPER KLAMATH(2)	US BUREAU RECLAMATION	584	282	384	371	132
KLAHATH RIVER	CLEAR LAKE(2)	US BUREAU RECLAMATION	527	247	303	228	92
TRINITY RIVER	CLAIR ENGLE	US BUREAU RECLAMATION	2,450	1,900	2,040 63	1,500	79
RUSSIAN RIVER	LAKE HENDOCINO	US CORPS OF ENGINEERS	123	60	63	34	57
SAN FRANCISCO BAY BASIN CALAVERAS CREEK	CALAVERAS (3)	CITY-CO SAN FRANCISCO	100	58	73	30	52
CENTRAL COAST BASIN				218(6)		-1-	
SAN ANTONIO RIVER	SAN ANTON10 NACIHIENTO	MONTEREY CO FCWCD	350 350	120	300 223	243 57	111 48
SANTA YNEZ RIVER	CACHUHA	US BUREAU RECLAMATION	205	172	185	145	84
SOUTH COAST (8)							
COYOTE CREEK	CASITAS	CASITAS HUNICIPAL WD	254	180	222	204	113
PIRU CREEK	LAKE PIRU	UNITED WATER CON DIST	101 171	25 163 (5)	17 164	12 163	48 100
PIRU CREEK	PYKAHID(3) CASTAIC(3)	CALIF DEPT WATER RES CALIF DEPT WATER RES	324	237(5)	189	237	100
CASTAIC CREEK	PERRIS (3)	CALIF DEPT WATER RES	132	87 (5)	96	87	100
TRIB CAJALCO CREEK	LAKE MATHEWS (4)	METROPULITAN WATER DIST	182	111	122	91	82
SAN JACINTO RIVER	LAKE ELSINORE	CALIF DEPT PARKS AND REC	125	22	8	9	41
SAN LUIS REY RIVER	HENSHAW	VISTA IRRIGATION DIST	204	7	2	2	29
SAN DIEGO RIVER	EL CAPITAN(3)	CITY OF SAN DIEGO	117	23	16	9	39
SACRAMENTO RIVER	SHASTA	US BUREAU RECLAMATION	4,550	3,350	3,570	1,300	39
CLEAR CREEK	WHISKEYTOWN	US BUREAU RECLAMATION	241	224	236	239	107
N FK FEATHER RIVER	LAKE ALHANOR	PAC GAS AND ELEC CO	1,310	826	906	579	70
BUCKS CREEK	BUCKS LAKE	PAC GAS AND ELEC CO	103	63	70	49	78
FEATHER RIVER	OROVILLE	CALIF DEPT WATER RES	3,540	2,540(6)	2,860	1,830	72 55
NORTH YUBA RIVER SDUTH YUBA RIVER	NEW BULLARDS BAR SPAULDING SYSTEM	YUBA CD WATER AGENCY PAC GAS AND ELEC CO	961 137	630(6) 69	617 73	344 47	68
BEAR RIVER	CAMP FAR WEST	SO SUTTER WATER DIST	103	50	59	4	8
H FK AMERICAN RIVER	FRENCH HEADOWS	PLACER CO WATER AGENCY	134	91	95	41	45
RUBICON RIVER	NELL HOLE	PLACER CO WATER AGENCY	208	135	153	110	81
SILVER CREEK	UNION VALLEY	SACRAMENTO HUN UD	271	1 75	144	34	19
AMERICAN RIVER	FOLSON	US BUREAU RECLAMATION US CORPS OF ENGINEERS	1,010	700 31	773	416	59 68
STONY CREEK CACHE CREEK	BLACK BUTTE CLEAR LAKE	YOLO COUNTY FOWCD	420	77	39 77	0	D
N FK CACHE CREEK	INDIAN VALLEY	YOLO COUNTY FCWCD	300	0(5)	105	D	0
PUTAH CREEK	LAKE BERRYESSA	US BUREAU RECLAMATION	1,600	1,380	1,380	1,040	75
N KF MOKELUMNE RIVER	SALT SPRINGS	PAC GAS AND ELEC CO	139	81	71	28	35
MOKELUMNE RIVER	PARDEE	EAST BAY HUN UD	210 432	192 276	201	107 186	56 67
HOKELUHNE RIVER CALAVERAS RIVER	CAMANCHE NEW HOGAN	EAST BAY MUN UD US CORPS OF ENGINEERS	325	153	337 145	71	46
STANISLAUS RIVER	MELONES	PAC GAS AND ELEC CD	113	12	12	4	33
CHERRY CREEK	CHERRY LAKE	CITY-CO SAN FRANCISCO	269	145	180	120	83 49
TUDLUMNE RIVER	HETCH HETCHY	CITY-CO SAN FRANCISCO	360	248	263	121	49
TUOLUMNE RIVER	DON PEDRO	TURLOCK-HODESTO ID	2,030	940(6) 564	1,600 707	687 244	73
SAN JOAQUIN RIVER	LAKE MCCLURE MAMMOTH PDDL	MERCED IRRIG DISTRICT SD CALIFORNIA EDISON CO	1,030	38	47	21	73 43 55
HOND CREEK	THOMAS A EDISON	SO CALIFORNIA EDISON CO	125	95	91	10	11
STEVENSON CREEK	SHAVER LAKE	SD CALIFORNIA EDISON CO	135	78	87	28	36
SAN JOAQUIN RIVER	HILLERTON LAKE	US BUREAU RECLAMATION	521	175	160	224	128
SAN LUIS CREEK	SAN LUIS (3)	US BUREAU REC-CALIF DWR	2,040	1,640(6) 44	1,030	678	41 80
HELMS CREEK N FK KINGS RIVER	COURTRIGHT WISHON	PAC GAS AND ELEC CD PAC GAS AND ELEC CO	123 128	89	61 105	35 64	72
KINGS RIVER	PINE FLAT	US CORPS OF ENGINEERS	1,000	428	354	208	49
KAWEAH RIVER	TERMINUS	US CORPS OF ENGINEERS	150	17	10	17	100
KERN RIVER	ISABELLA	US CORPS OF ENGINEERS	570	187	176	70	37
LAHONTAN (10)				.1(1)	.10		20
LITTLE TRUCKEE RIVER	STAMPEDE(2) LAKE TAHDE(2,7)	US BUREAU RECLAMATION US BUREAU RECLAMATION	227 745	147 (6) 538	149 580	58 308	39 57
TRUCKEE RIVER OWENS RIVER	LAKE CROWLEY	LOS ANGELES DEPT WP	184	138	157	53	38
COLORADO RIVER BASIN							
COLORADO RIVER	LAKE POWELL (2,7)	US BUREAU RECLAMATION	25,000	12,800	20,200	19,600	153
COLORADO RIVER	LAKE MEAD(2,7)	US BUREAU RECLAMATION	26,100	17,100	20,200	20,100	118
COLORADO RIVER	LAKE MOHAVE(2,7)	US BUREAU RECLAMATION	1,810	1,400	1,390	1,720	123
COLORADO RIVER	LAKE HAVASU(2,7)	US BUREAU RECLAMATION	619	201	569	201	104

<sup>(1)</sup> CAPACITY AND STORAGE VALUES ROUNDED TO NEAREST THREE SIGNIFICANT NUMBERS.
(2) INTERSTATE RESERVOIR USED JOINTLY BY CALIFORNIA AND ADJACENT STATES.

<sup>(2)</sup> INTERSTATE RESERVOIR USED JOINTLY BY CALIFORNIA AND ADJACENT S
(3) INCLUDES FOREIGN WATER.
(4) STORES ONLY IMPORTED COLORADO RIVER WATER.
(5) NEW RESERVOIR -- AVERAGE CONSIDERED EQUAL TO CURRENT STORAGE.
(6) LESS THAN 10-VERA AVERAGE.

<sup>(0)</sup> LESS IMMN ID-TRAN AVERAGE.
(7) GATA BASED DH ACTIVE OR USABLE CAPACITY TABLES.
(8) SOUTH COAST INCLUDES LOS ANGELES, SANTA AMA, AND SAN DIEGO BASINS.
(9) CENTRAL VALLEY INCLUDES SACRAMENTO, SAN JOAQUIN, AND TULARE LAKE BASINS.
(10) LAHONTAN INCLUDES NORTH AND SOUTH LAHONTAN BASINS.

### TABLE 4. STORAGE IN MAJOR RESERVOIRS (METRIC UNITS)

			CAPACITY	STORAGE AS OF	OF OCTOBER 1 CUBIC HECTOMETRES (1)				
HYDROLOGIC BASIN AND STREAM	R ES ERVO IR	OP ERAT OR	CUBIC HECTOMETRES (1)	10-YEAR AVERAGE 1966-1975	1975	1976	PERCENT OF AVERAGE		
NORTH COAST DASIN									
NORTH COAST BASIN	UPPER KLAMATH (2)	US BUREAU RECLAMATION	720	348	474	458	132		
KLAMATH RIVER	CLEAR LAKE(2)	US BUREAU RECLAMATION	650	305	374	281	92		
TRINITY RIVER	CLAIR ENGLE	US BUREAU RECLAMATION	3 020	2 340	2 520	1 850	79		
RUSSIAN RIVER	LAKE MENDOCINO	US CORPS OF ENGINEERS	152	74	78	42	57		
SAN FRANCISCO BAY BASIN CALAVERAS CREEK	CALAVERAS (3)	CITY-CO SAN FRANCISCO	123	72	90	37	52		
CENTRAL COAST BASIN			100	0(0(()	370	300	111		
SAN ANTONIO RIVER	SAN ANTONIO NACIMIENTO	MONTEREY CO FCWCD	432 432	269(6) 148	275	70	48		
NAC IMIENTO RIVER SANTA YNEZ RIVER	CACHUMA	US BUREAU RECLAMATION	253	212	228	179	84		
SOUTH COAST (8)									
COYOTE CREEK	CASITAS	CASITAS MUNICIPAL WD	313	222	274	252	113		
PIRU CREEK	LAKE PIRU	UNITED WATER CON DIST	125	31	21	15	48		
PIRU CREEK	PYRAMID(3)	CALIF DEPT WATER RES	211	201 (5)	202	201	100		
CASTAIC CREEK	CASTAIC (3) PERRIS (3)	CALIF DEPT WATER RES	400 163	292 (5) 107 (5)	233 118	292 107	100		
TRIB CAJALCO CREEK	LAKE MATHEWS (4)	METROPOLITAN WATER DIST	224	137	150	112	82		
SAN JACINTO RIVER	LAKE ELSINORE	CALIF DEPT PARKS AND REC	154	27	10	11	41		
SAN LUIS REY RIVER	HENSHAW	VISTA IRRIGATION DIST	252	9	2	2	29		
SAN DIEGO RIVER	EL CAPITAN(3)	CITY OF SAN DIEGO	144	28	20	11	39		
CENTRAL VALLEY (9)	CUACTA	US BUREAU RECLAMATION	- (10	4 130	4 400	1 600	39		
SACRAMENTO RIVER	SHASTA WHISKEYTOWN	US BUREAU RECLAMATION	5 610 297	276	291	295	107		
N FK FEATHER RIVER	LAKE ALMANOR	PAC GAS AND ELEC CO	1 620	1 020	1 120	714	70		
BUCKS CREEK	BUCKS LAKE	PAC GAS AND ELEC CO	127	78	86	60	78		
FEATHER RIVER	OROVILLE	CALIF DEPT WATER RES	4 370	3 130(6)	3 530	2 260	72		
NORTH YUBA RIVER	NEW BULLARDS BAR	YUBA CO WATER AGENCY	1 190	777(6)	761	424	55		
SOUTH YUBA RIVER	SPAULDING SYSTEM	PAC GAS AND ELEC CO	169	85	90	58	68		
BEAR RIVER	CAMP FAR WEST	SO SUTTER WATER DIST	127	62	73	_5	. 8		
M FK AMERICAN RIVER	FRENCH MEADOWS	PLACER CO WATER AGENCY	165	112	117	51	45		
RUBICON RIVER	HELL HOLE	PLACER CO WATER AGENCY SACRAMENTO MUN UD	257 334	167 216	189 178	136 42	81 19		
SILVER CREEK AMERICAN RIVER	UNION VALLEY	US BUREAU RECLAMATION	1 250	863	953	513	59		
STONY CREEK	BLACK BUTTE	US CORPS OF ENGINEERS	197	38	48	26	68		
CACHE CREEK	CLEAR LAKE	YOLO COUNTY FCWCD	518	95	95	0	0		
N FK CACHE CREEK	INDIAN VALLEY	YOLO COUNTY FCWCD	370	0(5)	130	0	0		
PUTAH CREEK	LAKE BERRYESSA	US BUR EAU RECLAMATION	1 970	1 700	1 700	1 280	75		
N KF MOKELUMNE RIVER	SALT SPRINGS	PAC GAS AND ELEC CO	171	100	88	35	35		
MOKELUMNE RIVER	PARDEE	EAST BAY HUN UD	259	237	248 416	132	56 67		
MOKELUMNE RIVER CALAVERAS RIVER	CAMANCHE NEW HOGAN	EAST BAY HUN UD US CORPS OF ENGINEERS	533 401	340 189	179	229 88	46		
STANISLAUS RIVER	MELONES	PAC GAS AND ELEC CO	139	15	15	5	33		
CHERRY CREEK	CHERRY LAKE	CITY-CO SAN FRANCISCO	332	179	222	148	83		
TUOLUMNE RIVER	HETCH HETCHY	CITY-CO SAN FRANCISCO	ليليل	306	324	149	49		
TUDLUMNE RIVER	DON PEDRO	TURLOCK-HODESTO ID	2 500	1 160(6)	1 970	847	73		
HERCED RIVER	LAKE MCCLURE	MERCED IRRIG DISTRICT	1 270	696	872	301	43		
SAN JOAQUIN RIVER	MAMMOTH POOL	SO CALIFORNIA EDISON CO	152	47	58	26	55 11		
MONO CREEK STEVENSON CREEK	THOMAS A EDISON SHAVER LAKE	SO CALIFORNIA EDISON CO SO CALIFORNIA EDISON CO	154 167	117 97	113	12 35	36		
SAN JOAOUIN RIVER	MILLERTON LAKE	US BUREAU RECLAMATION	643	216	197	276	128		
SAN LUIS CREEK	SAN LUIS (3)	US BUR EAU REC -CALIF DWR	2 520	2 020(6)	1 270	836	41		
HELMS CREEK	COURTR IGHT	PAC GAS AND ELEC CO	152	54	75	43	80		
N FK KINGS RIVER	WISHON	PAC GAS AND ELEC CO	158	110	130	79	72		
KINGS RIVER	PINE FLAT	US CORPS OF ENGINEERS	1 230	528	437	257	49		
KAWEAH RIVER KERN RIVER	TERMINUS ISABELLA	US CORPS OF ENGINEERS US CORPS OF ENGINEERS	185 703	21 231	12 217	21 86	100 37		
LAHONTAN (10)									
LITTLE TRUCKEE RIVER	STAMPEDE(2)	US BUREAU RECLAMATION	280	181 (6)	184	72	39		
TRUCKEE RIVER	LAKE TAHOE (2,7)	US BUREAU RECLAMATION	919	664	715	380	57		
OWENS RIVER	LAKE CROWLEY	LOS ANGELES DEPT WP	227	170	194	65	38		
COLORADO RIVER BASIN	LAKE POWELL(2,7)	US BUR EAU RECLAMATION	30 800	15 800	24 900	24 200	153		
COLORADO RIVER	LAKE MEAD (2,7)	US BUREAU RECLAMATION	32 200	21 100	24 900	24 800	118		
COLORADO RIVER	LAKE MOHAVE(2,7)	US BUREAU RECLAMATION	2 230	1 730	1 720	2 120	123		

CAPACITY AND STORAGE VALUES ROUNGED TO NEAREST THREE SIGNIFICANT NUMBERS.

INTERSTATE RESERVOIR USED JOINTLY BY CALIFORNIA AND ADJACENT STATES.

<sup>(2)</sup> (3) (4) (5) (6) (7) (8) (9) (10) INTERSTATE RESERVOIR USED JOINTLY BY CALIFORNIA AND ADJACENT STATES.
INCLUDES FOREIGN WATER.
STORES ONLY IMPORTED COLORADO RIVER WATER.
NEW RESERVOIR - AVERAGE CONSIDERED EQUAL TO CURRENT STORAGE.
LESS THAN 10-YEAR AVERAGE.
DATA BASED ON ACTIVE OR USABLE CAPACITY TABLES.
SOUTH COAST INCLUDES LOS ANGELES, SANTA ANA, AND SAN DIEGO BASINS.
CENTRAL VALLEY INCLUDES SACRAMENTO, SAN JOAQUIN, AND TULARE LAKE BASINS.
LAHONTAN INCLUDES NORTH AND SOUTH LAHONTAN BASINS.

Overall statewide reservoir storage on October 1, 1976 was only 63 percent of average, 47 percent below the year before. This was a decrease of nearly 11 700 cubic hectometres (9.5 million acre-feet) and indicates that many users dependent upon stored supplies would face serious water shortages if inflows were again below normal.

Central Valley reservoirs, with about 80 percent of the State's total capacity, accounted for most of the decrease, as they fell more than 10 200 cubic hectometres (8.3 million acre-feet) during the year. Their October 1 storage averaged only about 58 percent of normal.

Elsewhere, storages also declined during the year, ranging from a 6 percent decrease in the South Coastal area to a 56 percent decrease in the Central Coast Basin. In contrast was the above-normal status of inter-state storage projects on the Colorado River, a major source of imported supplies for Southern California. The combined storage in these reservoirs (Lakes Powell, Mead, Mohave, and Havasu) was 132 percent of the October 1 average.

TABLE 5. SUMMARY OF RESERVOIR STORAGE DATA THOUSANDS OF ACRE-FEET (CUBIC HECTOMETRES)

			, , , ,			-,
BASIN	NUMBER OF RESERVOIRS	TOTAL CAPACITY	10-YEAR AVERAGE 1966-75	STORAGE OCTOBER 1 1976	PERCENT OF AVERAGE	PERCENT OF CAPACITY
INTRASTATE:				·		
NORTH COAST	8	2,940	2,160	1,750	81	60
SAN FRANCISCO BAY	18	(3 630) 696	(2 660) 404 (498)	(2 160) 299	74	43
CENTRAL COAST	9	(859) 1,050 (1 300)	(498) 619 (764)	(369) 539 (665)	87	51
SOUTH COAST (1)	31	2,300	1,070	1,060	99	46
SACRAMENTO	43	16,300	11,100	6,640	60	41
SAN JOAQUIN AND TULARE LA	KE 36	(20 100) 10,700	(13 700) 5,880	(8 190) 3,180	54	30
LAHONTAN (2)	8	(13 200) 426 (525)	(7 250) 313 (386)	(3 920) 208 (257)	66	49
SUBTOTAL	153	34,400 (42 400)	21,500 (26 500)	13,700 (16 900)	64	40
INTERSTATE:						
NORTH COAST	3	1,210	569	635	112	52
LAHONTAN (2)	5	(1 490) 1,080	(7 <b>02</b> ) 738	(783)	54	37
COLORADO RIVER (3)	L <sub>4</sub>	(1 330) 53,500 (66 000)	(910) 31,900 (39 300)	(493) 42,000 (51 800)	132	79
SUBTOTAL (3)	12	55,800 (68 800)	33,200 (41 000)	43,000 (53 000)	130	77
TOTAL (3)	165	90,200 (111 000)	54,700 (67 500)	56,700 (69 900)	1 04	63

INCLUGES LOS ANGELES, SANTA ANA, AND SAN DIEGO BASINS.
 INCLUDES NORTH AND SOUTH LAHONTAN BASINS

<sup>(3)</sup> INCLUDES DATA FOR LAKE MEAD AND LAKE POWELL WHICH REGULATE FLOW OF THE LOWER COLORADO RIVER, THE MAJOR SOURCE OF WATER FOR THE COLORADO RIVER BASIN AND SOUTH COAST AREA.

Tabulated below are 1975-76 water supply forecasts compared with observed\* unimpaired runoff for 25 major forecast points. These forecasts were included in the Bulletin No. 120-76 series "Water Conditions in California", published monthly in February, March, April, and May. Forecasts for both the April-July snowmelt period and total water year are shown, together with the error percentages for the May 1 forecasts, the last of the season. Analysis of the forecast errors indicates they were somewhat higher than average, particularly those for April-July flows, which usually range between 5 and 10 percent. Because of the low snowpack and dry winter and spring period, a relatively larger portion of the runoff was needed to replenish the soil moisture requirements. This situation was reflected in the larger forecast errors.

## TABLE 6. COMPARISONS OF WATER SUPPLY FORECASTS WITH OBSERVED UNIMPAIRED RUNOFF

(Flows in 1,000 Acre-feet)

APR-JULY   WATER YR   APR-JULY   WATER YR	STREAH AND STATION					CASTS				OBSE	RVEO OWS	FORECAS IN PE	RCENT
TRINITY R. AT LEMISTON  410   440   375   430   370   416  SACRAHERTO R INFLOW TO SHASTA LAKE  195  480  190  380  180  350  220  390  157  335  + 40  HocLOUD R INFLOW TO SHASTA LAKE  310  910  315  800  295  740  300  830  268  886  886  + 12  TOTAL INFLOW TO SHASTA LAKE  1,385  4,030  1,410  3,750  1,320  3,710  1,370  3,730  1,370  3,730  1,375  3,613  + 21  SACRAHERTO R. ABOVE BEND BRIGGE  1,800  5,500  1,800  5,500  1,800  5,500  1,800  5,000  1,800  1,800  1,800  4,960  1,800  4,965  1,80				1		-							
SACRAMENTO R INFLOW TO SHASTA LAKE  195		APR-JULY	WATER YR	APR-JULY	WATER Y								
Necloud R INFLOW TO SHASTA LAKE 310 910 315 800 295 740 300 830 268 856 + 12 PIT R INFLOW TO SHASTA LAKE 850 2,550 875 2,480 820 2,440 775 2,300 804 2,441 - 4 TOTAL INFLOW TO SHASTA LAKE 1,385 4,030 1,410 3,750 1,320 3,710 1,370 3,730 1,135 3,613 2 1 2 SACRAHENTO R. ABOVE BEND BRIDGE 1,800 5,500 1,860 5,100 1,750 4,960 1,800 4,985 1,503 4,845 + 20 2 SACRAHENTO R. ABOVE BEND BRIDGE 1,800 5,500 1,860 5,100 1,750 4,960 1,800 4,985 1,503 4,845 + 20 2 SACRAHENTO R. ABOVE BEND BRIDGE 420 1,000 500 910 330 735 245 635 279 690 - 12 AHERICAN R INFLOW TO FOLSOM RES. 420 1,120 485 990 300 755 245 605 279 690 - 12 AHERICAN R INFLOW TO PAROCE RES. 195 350 190 300 755 245 700 3112 785 - 21 MOKELUHNE R INFLOW TO PAROCE RES. 195 350 190 305 140 250 120 230 123 236 - 2 STANISLAUS R INFLOW TO DON PEDRO RES. 290 515 265 440 185 3550 140 305 199 377 - 30 TOLULHNE R INFLOW TO DON PEDRO RES. 270 440 250 385 210 330 170 290 168 299 + 1 TOLULHNE R INFLOW TO DEVERGUER RES. 270 440 250 385 210 330 170 290 168 299 + 1 TOLULHNO TO EXCREQUER RES. 550 790 425 660 370 610 340 580 350 624 + 5 THERCE TO DEVERGUER RES. 550 790 425 660 370 610 340 580 350 624 - 2 TOLULE R INFLOW TO TO TEXTREUE TO LAKE 505 790 425 660 370 610 340 580 350 629 - 3 TOLULE R INFLOW TO TEXTREUE SEES. 550 780 4880 690 400 595 375 570 303 536 424 - 5 TANISAR R INFLOW TO TEXTREUE SEES. 550 780 4880 690 400 595 375 570 303 536 424 - 5 TANISAR R INFLOW TO TEXTREUE SEES. 550 780 4880 690 400 595 375 570 303 536 424 - 5 TANISAR R INFLOW TO TEXTREUE SEES. 120 200 95 155 85 145 80 140 75 75 147 + 7 TULLE R INFLOW TO TEXTREUE SEES. 120 200 95 155 85 145 80 140 75 75 147 + 7 TULLE R INFLOW TO TEXTREUE SEES. 120 200 95 155 85 145 80 140 75 75 147 + 7 TULLE R INFLOW TO TEXTREUE SEES. 120 200 95 155 85 145 80 140 75 147 + 7 TULLE R INFLOW TO TEXTREUE SEES. 120 200 95 155 85 145 80 140 75 147 + 7 TULLE R INFLOW TO TEXTREUE SEES. 120 200 95 155 85 145 80 140 75 147 + 7 TULLE R INFLOW TO TEXTREUE SEES. 120 120 120 110 120 110 12	TRINITY R. AT LEWISTON	410		440		375		430		370		+ 16	
PIT R INFLOW TO SHASTA LAKE  850	SACRAMENTO R INFLOW TO SHASTA LAKE	195	480	190	380	180	350	220	390	157	335	+ 40	+ 15
TOTAL INFLOW TO SHASTA LAKE  1,385	HcCLOUD R INFLOW TO SHASTA LAKE	310	910	315	800	295	740	300	830	268	856	+ 12	- 3
SACRAHENTO R. ABOVE BEND BRIDGE 1,800 5,500 1,860 5,100 1,750 4,960 1,800 4,985 1,503 4,845 + 20 FEATHER R INFLOW TO GROVILLE RES. 960 2,450 965 2,150 700 1,865 610 1,760 618 1,862 - 1 1 1,700 500 910 330 755 245 635 279 690 - 12 AMERICAN R INFLOW TO FOLSOW RES. 420 1,120 485 990 300 755 245 700 312 785 - 21 COSUMNES R. AT MICHIGAN BAR 50 130 45 990 23 660 20 57 15 55 + 33 MORECLUMRE R INFLOW TO PAROCE RES. 195 350 199 305 140 250 120 230 123 236 - 2 STANISLAUS R INFLOW TO HELONES RES. 290 515 265 440 185 350 140 305 199 377 - 30 TUOLUMNE R INFLOW TO BENEGUE RES. 520 905 485 790 400 690 345 635 3330 624 + 5 HERCEO R INFLOW TO ON PEORO RES. 270 440 250 385 210 330 170 290 168 299 + 1 SAN JOAQUIN R INFLOW TO PINE FLAT RES. 540 780 480 690 400 595 375 570 303 536 424 15 SAN JOAQUIN R INFLOW TO PINE FLAT RES. 540 780 480 690 400 595 375 570 303 536 424 15 SAN JOAQUIN R INFLOW TO SURGES RES. 120 200 95 155 85 145 80 140 75 147 7 TULE R INFLOW TO SURGES RES. 120 200 95 155 85 145 80 140 75 147 7 TULE R INFLOW TO SURGES RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SURGES RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SURGES RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SURGES RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 104 239 4 6 8 KERN R INFLOW TO SABELLA RES. 115 245 120 235 110 220 110 220 10	PIT R INFLOW TO SHASTA LAKE	850	2,550	875	2,480	820	2,440	775	2,300	804	2,441	- 4	- 6
FEATHER R INFLOW TO OROVILLE RES.  960   2,450   965   2,150   700   7,865   610   1,760   618   7,862   -1   70BA R. AT SHARTVILLE   420   1,000   500   910   330   735   245   635   279   690   -12   4AERICAN R INFLOW TO FOLSON RES.   420   1,120   488   990   300   755   245   700   312   785   -21   COSUMNES R. AT HICHIGAN BAR   50   130   45   990   23   60   20   57   15   55   +33   HONELUMINE R INFLOW TO PROBEE RES.   195   350   190   305   140   250   120   230   123   236   -2   STANISLAUS R INFLOW TO DELONES RES.   290   515   265   440   185   350   140   305   199   377   -3   TUOLUMINE R INFLOW TO DEXCHEQUER RES.   270   488   790   400   690   345   635   330   624   +5   HERCEO R INFLOW TO EXCHEQUER RES.   270   440   250   385   210   330   170   290   168   299   +1   SAN JOAQUIN R INFLOW TO PINE FLAT RES.   500   780   480   690   400   595   375   570   303   536   +24   KAWEAH R INFLOW TO SANGERES.   120   200   95   155   85   145   80   140   75   147   +7   TUBE R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERN R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERN R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERN R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERN R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERN R INFLOW TO SAGRELA RES.   146   50   12   40   12   40   12   40   13   42   -8   KERR R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERR R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERR R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERR R INFLOW TO ISABELLA RES.   115   245   120   235   110   220   110   220   104   239   +6   KERR R INFLOW TO ISABE	TOTAL INFLOW TO SHASTA LAKE	1,385	4,030	1,410	3,750	1,320	3,710	1,370	3,730	1,135	3,613	+ 21	+ 3
YUBB R. AT SMARTVILLE 420 1,000 500 910 330 735 245 635 279 690 - 12 AHERICAN R INFLOW TO FOLSOH RES. 420 1,120 485 990 300 755 245 700 312 785 - 21 COSUMNES R. AT MICHIGAN BAR 50 130 45 90 23 60 20 57 15 55 + 33 MOKEUHNE R INFLOW TO PAROEE RES. 195 350 190 305 140 250 120 230 123 236 - 2 STANISLAUS R INFLOW TO DECINES RES. 290 515 265 440 185 350 140 305 199 377 - 30 TUDLUMNE R INFLOW TO ON PEORO RES. 520 905 488 790 400 690 345 635 330 624 + 5 HERCEO R INFLOW TO EXCHEQUER RES. 270 440 250 385 210 330 170 290 168 299 + 1 SAN JOAQUIN R INFLOW TO HILLERTON LAKE 505 790 425 660 370 610 340 580 350 629 - 3 KINGS R INFLOW TO TERHINUS RES. 540 780 480 690 400 595 375 570 303 536 424 KAMEAH R INFLOW TO TERHINUS RES. 120 200 95 155 85 145 80 140 75 147 + 7 TUDLE R INFLOW TO TERHINUS RES. 115 245 120 235 110 220 110 220 104 239 + 6 KERN R INFLOW TO ISABELLA RES. 115 245 120 235 110 220 110 220 104 239 + 6 KEKN R INFLOW TO ISABELLA RES. 115 245 120 235 110 220 110 220 104 239 + 6 KEKN R INFLOW TO FARAO 120 120 110 70 443 LAKE TAHOE RISE 0.64 0.65 0.55 0.42 0.24 75 EAST CARSON R. NEAR GARONERVILLE 90 85 70 60 64 4 6 MEST CARSON R. NEAR GARONERVILLE 10 12 17 14	SACRAHENTO R. ABOVE BEND BRIDGE	1,800	5,500	1,860	5,100	1,750	4,960	1,800	4,985	1,503	4,845	+ 20	+ 3
AHERICAN R INFLOW TO FOLSON RES.  420 1,120 485 990 300 755 245 700 312 785 - 21  COSUMNES R. AT MICHIGAN BAR  50 130 45 90 23 60 20 57 15 55 + 33  NOKELUMBE R INFLOW TO PAROEE RES.  195 350 190 305 140 250 120 230 123 236 - 2  STANISLAUS R INFLOW TO ON PEGRO RES.  290 515 265 440 185 350 140 305 199 377 - 30  TUDI, UMBER INFLOW TO ON PEGRO RES.  520 905 488 790 400 690 345 635 330 624 + 5  SAN JOAQUIN R INFLOW TO TO KREGUER RES.  270 440 250 385 210 330 170 290 168 299 + 1  SAN JOAQUIN R INFLOW TO PINE FLAT RES.  540 780 480 690 400 595 375 570 303 536 + 24  KINGS R INFLOW TO PINE FLAT RES.  540 780 480 690 400 595 375 570 303 536 + 24  KERN R INFLOW TO SUCCESS RES.  16 50 12 40 12 40 12 40 13 42 - 8  KERN R INFLOW TO SUCCESS RES.  115 245 120 235 110 220 110 220 104 239 + 6  FRUKEE R. TARDE TO FARAO  120 120 110 100 70 43  LAKE TAHOE RISE  0.6' 0.6' 0.55' 0.42' 0.24' 75  EAST CARSON R. NEAR BRIGGEPORT  17 17 15 10 7 43	FEATHER R INFLOW TO OROVILLE RES.	960	2,450	965	2,150	700	1,865	610	1,760	618	1,862	- 1	- 5
COSUMNES R. AT MICHIGAN BAR  50 130 45 90 23 60 20 57 15 55 + 33 MOKELUNINE R INFLOW TO PAROEE RES.  195 350 190 305 140 250 120 230 123 236 - 2 STANISLAUS R. S. INFLOW TO PAROEE RES.  290 515 265 440 185 350 140 305 199 377 - 30 TUQUIMER R INFLOW TO DELONES RES.  290 515 265 440 185 350 140 305 199 377 - 30 TUQUIMER R INFLOW TO DELONES RES.  270 40 250 385 210 330 170 290 168 299 + 1 SAN JOAQUIN R INFLOW TO EXCHEQUER RES.  270 440 250 385 210 330 170 290 168 299 + 1 SAN JOAQUIN R INFLOW TO PINE FLAT RES.  500 780 480 690 400 595 375 570 303 536 + 24 KINGS R INFLOW TO PINE FLAT RES.  540 780 480 690 400 595 375 570 303 536 + 24 KAWEAH R INFLOW TO TERHINUS RES.  120 200 95 155 85 145 80 140 75 147 + 7 TULE R INFLOW TO ISABELLA RES.  115 245 120 235 110 220 110 220 104 239 + 6 KERN R INFLOW TO ISABELLA RES.  115 245 120 235 110 220 110 220 104 239 + 6 TULCKEE R. TAMOE TO FARAO  120 120 120 100 70 43 LAKE TAMOE RISE  0.6' 0.6' 0.5' 0.42' 0.24' 4.75 EAST CARSON R. NEAR GARONERVILLE  90 85 70 60 64 4.5 EAST WALKER R. NEAR BRIGGEPORT  17 17 15 11 7 43	YUBA R. AT SHARTVILLE	420	1,000	500	910	330	735	245	635	279	690	- i2	- 8
MOKELUHNE R INFLOW TO PAROEE RES.  195 350 190 305 140 250 120 230 123 236 - 2  STANISLAUS R INFLOW TO HELDNES RES.  290 515 265 440 185 350 140 305 199 377 - 30  TUDULHNE R INFLOW TO DON PEGRO RES.  520 905 488 790 400 690 345 635 330 624 + 5  HERCEO R INFLOW TO EXCHEQUER RES.  270 440 250 385 210 330 170 290 168 299 + 1  SAN JOAQUIN R INFLOW TO PINE FLAT RES.  540 780 488 690 400 595 375 570 303 536 629 - 3  KINGS R INFLOW TO DESTRUCTION LAKE  505 790 425 660 370 610 340 580 350 629 - 3  KINGS R INFLOW TO TERHINUS RES.  120 200 95 155 85 145 80 140 75 1477 + 7  TULE R INFLOW TO SUCCESS RES.  116 50 12 40 12 40 12 40 13 42 - 8  KERN R INFLOW TO SUCCESS RES.  115 245 120 235 110 220 110 220 104 239 + 6  TRUCKEE R. TAHOE TO FARAO  120 120 110 100 70 43  LAKE TAHOE RISE  0.6' 0.6' 0.5' 0.55' 0.42' 0.24' 75  EAST CARSON R. NEAR GARONERY ILLE  90 85 70 60 64 6  EAST WALKER R. MEAR BRIOGEPORT  17 17 143	AMERICAN R INFLOW TO FOLSOM RES.	420	1,120	485	990	300	755	245	700	312	785	- 21	- 11
STANISLAUS R INFLOW TO HELONES RES.  290 515 265 440 185 350 140 305 199 377 - 30 TUDOLIMHE R INFLOW TO SOON PEORO RES.  520 905 485 790 400 690 345 635 330 624 + 5 HERCEO R INFLOW TO SCHEGUER RES.  270 440 250 385 210 330 170 290 168 299 + 1  SAN JOAQUIN R INFLOW TO PINE FLAT RES.  540 780 480 690 400 595 375 570 303 536 + 24  KINGS R INFLOW TO PINE FLAT RES.  540 780 480 690 400 595 375 570 303 536 + 24  KINGS R INFLOW TO SUCCESS RES.  16 50 12 40 12 40 12 40 13 42 - 8  KERN R INFLOW TO SUCCESS RES.  16 50 12 40 12 40 12 40 13 42 - 8  KERN R INFLOW TO SABELLA RES.  115 245 120 235 110 220 110 220 104 239 + 6  TRUCKE R. TAPOE TO FARAO  120 120 110 100 70 43  LAKE TAHOE RISE  0.6' 0.6' 0.55' 0.42' 0.24' 75  EAST CARSON R. NEAR GARONERY ILLE  90 85 70 60 64 6  WEST CARSON AT NOOFFORDS  16 15 18 17 17 12  EAST WALKER R. NEAR BRIGGEPORT  17 17 15 10 7 43	COSUMNES R. AT MICHIGAN BAR	50	130	45	90	23	60	20	57	15	55	+ 33	+ 4
TUDLUHNE R INFLON TO GON PEORO RES. 520 905 485 790 400 690 345 635 330 624 + 5 HERCED R INFLON TO EXCHEQUER RES. 270 440 250 385 210 3330 170 290 168 299 + 1 330 170 290 168 299 + 1 300 170 170 EXCHEQUER RES. 505 790 425 660 370 610 340 580 350 629 - 3 KINGS R INFLON TO PINE FLAT RES. 540 780 480 690 400 595 375 570 303 536 + 24 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MOKELUHNE R INFLOW TO PAROEE RES.	195	350	190	305	140	250	120	230	123	236	- 2	- 3
HERCEO R INFLOW TO EXCHEQUER RES. 270 440 250 385 210 330 170 290 168 299 + 1  SAN JAQUIN R INFLOW TO HILLERTON LAKE 505 790 425 660 370 610 340 580 350 629 - 3  KINGS R INFLOW TO PINE FLAT RES. 540 780 480 690 400 595 375 570 303 536 + 24  KAMEAH R INFLOW TO TERHINUS RES. 120 200 95 155 85 145 80 140 75 147 + 7  TULE R INFLOW TO SUCCESS RES. 16 50 12 40 12 40 12 40 13 42 - 8  KERN R INFLOW TO SUCCESS RES. 115 245 120 235 110 220 110 220 104 239 + 6  TRUCKEE R. TARDE TO FARAO 120 110 110 70 43  LAKE TAHOE TO FARAO 120 85 70 60 64 6  EAST CARSON R. NEAR GRONERY ULLE 90 85 70 60 64 6  EAST CARSON AT WOODFORDS 16 15 18 15 17 12  EAST WALKER R. NEAR BRIGGEPORT 17 17 143	STANISLAUS R INFLOW TO HELONES RES.	290	515	265	440	185	350	140	305	199	377	- 30	- 19
SAN JOAQUIN R INFLOW TO HILLERTON LAKE  505 790 425 660 370 610 340 580 350 629 - 3 KINGS R INFLOW TO PINE FLAT RES.  540 780 480 690 400 595 375 570 303 536 + 24 KAMEAN R INFLOW TO STREINIUS RES.  120 200 95 155 85 145 80 140 75 147 + 7 TULE R INFLOW TO SUCCESS RES.  16 50 12 40 12 40 12 40 13 42 - 8 KERN R INFLOW TO ISABELLA RES.  115 245 120 235 110 220 110 220 104 239 + 6 TRUCKEE R. TAHOE TO FARAO  120 120 110 100 70 43 LAKE TAHOE RISE  0.6' 0.6' 0.55' 0.42' 0.24' 75 EAST CARSON R. NEAR GARONERY ILLE  90 85 70 60 64 6 EAST CARSON AT MODOFRORS  16 15 18 15 17 12 EAST WALKER R. NEAR BRIGGEPORT  17 17 15 10 7 43	TUOLUHNE R INFLOW TO OON PEORO RES.	520	905	485	790	400	690	345	635	330	624	+ 5	+ 2
KINGS R INFLOW TO PINE FLAT RES. 540 780 480 690 400 595 375 570 303 536 + 24 KAMEGH R INFLOW TO TERHINUS RES. 120 200 95 155 85 145 80 140 75 147 + 7 TULE R INFLOW TO SUCCESS RES. 16 50 12 40 12 40 13 42 - 8 KERN R INFLOW TO ISABELLA RES. 115 245 120 235 110 220 110 220 104 239 + 6 TRUCKEE R. TAMOE TO FARAO 120 120 110 100 70 43 LAKE TAHOE RISE 0.6' 0.6' 0.5' 0.42' 0.24' 75 EAST CARSON R. NEAR GARONERVILLE 90 85 70 60 64 6 MEST CARSON AT WOODFORDS 16 15 18 15 17 12 EAST WALKER R. MEAR BRIOGEPORT 17 17 15 10 7 43	HERCEO R INFLOW TO EXCHEQUER RES.	270	440	250	385	210	330	170	290	168	299	+ 1	- 3
KAMEAH R INFLOW TO TERHINUS RES. 120 200 95 155 85 145 80 140 75 147 + 7 TULE R INFLOW TO SUCCESS RES. 16 50 12 40 12 40 12 40 13 42 - 8 KERN R INFLOW TO SUCCESS RES. 115 245 120 235 110 220 110 220 104 239 + 6 TRUCKEE R. TAHOE TO FARAO 120 120 110 100 70 +43 LAKE TAHOE RISE 0.6' 0.6' 0.55' 0.42' 0.24' 75 EAST CARSON R. NEAR GARONERYILLE 90 85 70 60 64 6 EAST CARSON AT WOODFORDS 16 15 18 15 17 12 EAST WALKEE R. NEAR BRIOGEPORT 17 17 143	SAN JOAQUIN R INFLOW TO HILLERTON LAKE	505	790	425	660	370	610	340	580	350	629	- 3	- 8
TULE R INFLOW TO SUCCESS RES.  16 50 12 40 12 40 12 40 13 42 - 8 KERN R INFLOW TO ISABELLA RES.  115 245 120 235 110 220 110 220 1104 239 + 6 TRUCKEE R. TADBE TO FARAO  120 120 1110 100 70 + 43 LAKE TAHDE TO FARAO  10 6' 0.6' 0.55' 0.42' 0.24' + 75 EAST CARSON R. NEAR GARONERY ILLE  90 85 70 60 64 6 WEST CARSON AT WOODFORDS  16 15 18 15 1712 EAST WALKEE R. NEAR BRIGGEPORT  17 17 15 10 7 +43	KINGS R INFLOW TO PINE FLAT RES.	540	780	480	690	400	595	375	570	303	536	+ 24	+ 6
KERN R INFLOW TO ISABELLA RES.     115     245     120     235     110     220     110     220     104     239     + 6       TRUCKEE R. TAHOE TO FARAO     120      120      110      100      70      + 43       LAKE TAHOE RISE     0.6'      0.6'      0.5'      0.42'      0.24'      0.6'      0.6'      0.6'      60      60      60      6      1.6      1.5      18      15      17       1.7      1.7      1.2      1.0      7      4.3     1.0     1.0      1.7      1.7	KAWEAH R INFLOW TO TERMINUS RES.	120	200	95	155	85	145	80	140	75	147	+ 7	- 5
TRUCKEE R. TAHOE TO FARAO 120 120 110 100 70 + 43  LAKE TAHOE RISE 0.6' 0.6' 0.55' 0.42' 0.24' + 75  EAST CARSON R. NEAR GARONERVILLE 90 85 70 60 64 6  VEST CARSON AT WOODFORDS 16 15 18 15 17 12  EAST WALKER R. NEAR BRIDGEFORT 17 17 + 43	TULE R INFLOW TO SUCCESS RES.	16	50	12	40	12	40	12	40	13	42	- 8	- 5
LAKE TAHOE RISE 0.6' 0.6' 0.55' 0.42' 0.24' + 75 EAST CARSON R, NEAR GARONERYILLE 90 85 70 60 64 6 WEST CARSON AT WOODFORDS 16 15 18 15 1712 EAST WALKER R, NEAR BRIDGEPORT 17 17 143	KERN R INFLOW TO ISABELLA RES.	115	245	120	235	110	220	110	220	104	239	+ 6	+ 8
EAST CARSON R. NEAR GARONERYILLE     90      85      70      60      64         WEST CARSON AT WOODFORDS     16      15      15      17       12       EAST WALKER R. NEAR BRIDGEFORT     17      17      15      10      7      + 43	TRUCKEE R. TAHOE TO FARAO	120		120		110		100		70		+ 43	
WEST CARSON AT WOODFORDS     16      15      15      17      12       EAST WALKER R. NEAR BRIDGEPORT     17      17      15      10      7      + 43	LAKE TAHOE RISE	0.61		0.61		0.55		0.421		0.24		+ 75	
EAST WALKER R. NEAR BRIOGEPORT 17 17 15 10 7 +43	EAST CARSON R. NEAR GARONERVILLE	90		85		70		60		64		- 6	
	WEST CARSON AT WOODFORDS	16		15		18		15		17		- 12	
VEST WALKER B. NEAR COLEVILLE 80 - 75 - 60 - 50 - 10	EAST WALKER R. NEAR BRIOGEPORT	17		17		15		10		7		+ 43	
7, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20	WEST WALKER R. NEAR COLEVILLE	80		75		60		55		50		+ 10	

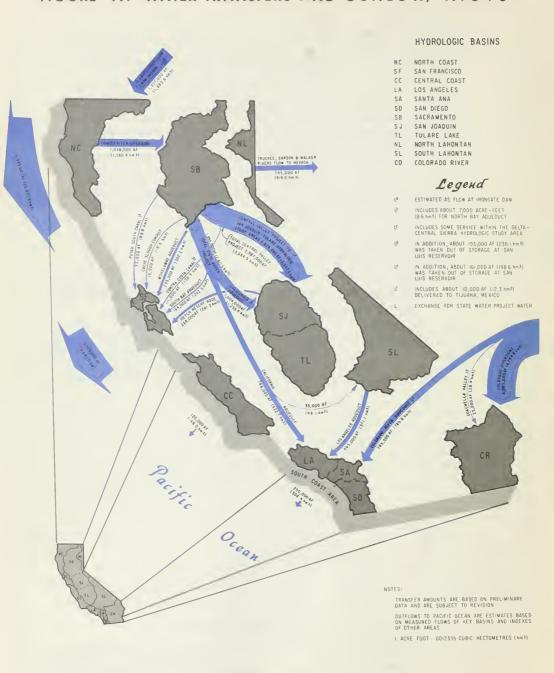
FORECAST ERRORS IN PERCENT = OBSERVED X 100

MAY I APRIL-JULY FORECASTS AVERAGE ABSOLUTE ERROR = 18% (25 FORECASTS)

MAY I WATER YEAR FORECASTS AVERAGE ABSOLUTE ERROR = 6% (18 FORECASTS)

<sup>\*</sup>Measured or computed.

### FIGURE 19. WATER TRANSFERS AND OUTFLOW, 1975-76



### WATER TRANSFERS AND OUTFLOW

The 1975-76 dry year increased water demands for irrigation and urban use, and resulted in larger exports from the Delta than the year before. Actual demands for water were even higher, but concern about maintaining reserves in carryover storage prompted some curtailment in deliveries. Additional supply for both Central Valley Project and State Water Project Delta export service was provided from storage in San Luis Reservoir.

Estimated CVP Delta exports were about 3 690 cubic hectometres (2.99 million acre-feet) in 1975-76, a 17 percent increase over 1974-75. In addition, the CVP took about 238 cubic hectometres (193,000 acre-feet) from San Luis Reservoir. Contra Costa Canal diversions were also up markedly from 1974-75, showing an increase of about 40 percent.

Total SWP Delta exports were about 2 420 cubic hectometres (1.96 million acre-feet), a 41 percent increase over 1974-75, as the Project continued to expand its service areas as new distribution facilities became available. SWP deliveries were significantly higher in all of its service areas. In addition, the SWP took about 199 cubic hectometres (161,000 acre-feet) from San Luis Reservoir.

Diversion of Colorado River water by The Metropolitan Water District of Scuthern California continued to decrease, reflecting the substitution of better quality SWP water from Northern California in the MWD service area. The 1975-76 diversion of 1 000 cubic hectometres (812,000 acre-feet) was about 84 cubic hectometres (68,000 acre-feet) less than 1974-75.

Some water transfers were reduced because of much lower runoff in 1975-76. The flows to Nevada of the Truckee, Carson, and Walker Rivers were just slightly over half those of the year before. Even Klamath River inflow from Oregon, down about 20 percent from 1974-75, was affected by the dry conditions, although not to the same extent as California streams were.

Diversions into the San Francisco Bay Area were generally above 1974-75, reflecting greater demands and less local supply. An exception was the Hetch Hetchy Aqueduct, where Tuolumne River exports were slightly less than the year before, as the City of San Francisco drew quite heavily on the storage in local reservoirs.

Total outflow to the Pacific Ocean was estimated at slightly over 29 600 cubic hectometres (24 million acre-feet), less than half of that of the year before.

Major water transfers between the various hydrologic areas, inflows to the State, and outflows to the Pacific Ocean and Nevada are depicted in Figure 19.



MUDSLIDES CLOSE FOOTHILL BOULEVARD IN SUNLAND

.... BUT CLEANUP CREWS ARE ON THE JOB

Heavy road equipment is used to clear off Footbill Boulevard of mud which gozed from



Rain Brings Mudslides; Storm Heading for Sea

### SOUTH COASTAL AREA



## Muds Sierr

### SoCal Rain Flows Into Sixth Day

By STEVE HEMMERICK and VERA DANIELSON



MBED—Neighbors help John MccDonnel, right, Woodland Drive in Sierra Modre, Roine coursed dig his cor out of mud-swomped garage at 582. Hooding and slides in several Southland area.



Storm Expected to Linger This Morning,

### CHAPTER III. FLOOD EVENTS

In this Year-of-the-Drought in California, the normal flood-producing winter months managed to produce only minor fluctuations in the major streams of the State. In the normally very wet North Coastal area, the flashy Smith River and the potentially devastating Eel River only reached the initial warning stage in their low-land delta areas. On the Sacramento River, a 63-year record of winter overflow at Tisdale Weir was broken when the peak stage during the entire winter was 0.5 metres (1.8 feet) below the weir crest. Hydrographs of selected (representative) streams, see Figures 22-25, graphically illustrate the absence of "normal" winter flood stages.

Nevertheless, some winter storms did reach the State, and a few brought rainfall of sufficient intensity to cause local damage. In the North Coast area, on February 25, 1976, two lives were lost during a storm when a truck plunged into Smith River near Patrick's Creek; on February 29, Highway 101 was closed by a major slide near Piercy, about 125 kilometres (78 miles) southeast of Eureka. More extensive property damage occurred in Southern California from an earlier February record high-intensity storm that drenched the south coastal mountains from San Diego to Los Angeles during the period February 3-10 (see Table 1 and Figure 4, Chapter I). Runoff and mudflows produced by this storm were most severe along the southern slopes of the San Gabriel Mountains north of Los Angeles, but flood control "crib" dams and sandbagging efforts in residential areas averted major damage. Several roads were blocked by flooding and mudflows; at least one home and several garages and automobiles were damaged by mudflows in Sierra Madre (a suburb of northern Los Angeles).

During the remainder of the normally wet season and through the summer, Californians were preoccupied with drought conditions. By April 1, twenty-seven counties had been declared Drought Disaster Areas... and then came September and Kathleen.

### Desert Area Battered By A Wall Of Water



On September 9-10, 1976, tropical storm Kathleen dumped 200 to 250 millimetres (8 to 10 inches) of rain on the coastal mountains of Southern California; runoff on the eastern slopes sent torrents of water down the desert washes of San Diego, Imperial, San Bernardino, and Riverside Counties (Figure 20, page 34, presents a reference map).

In Imperial County the hardest hit area was near and in the community of Ocotillo, located near the mouth of In-Ko-Pah Gorge through which Myer Creek flows--when it flows. Here, flash floods destroyed Myer Bridge on Interstate 8, washed out railroad and highway roadbeds, destroyed 7 homes and damaged scores of others, and claimed three lives. Flood marks in the In-Ko-Pah Gorge area indicated that a flood crest 9 metres (30 feet) high had swept down toward Ocotillo. New River, which flows northward from Mexico to the Salton Sea, rose 2 metres (6 feet) in 4 hours at Brawley, overflowed its banks, and crested 4 metres (12 feet) above normal. Flood, mud and debris damage occurred in the western portion of Imperial County from Ocotillo to El Centro to Brawley to the Salton Sea. Damage to crops, agricultural land, structures and equipment was estimated near \$12 million; of this, Imperial Irrigation District sustained about \$750,000 in facility damage, while the Elmore Desert Ranch, situated between Superstition Hills and the Salton Sea, sustained estimated damage of about \$2 million. Total damage in Imperial County was estimated at \$24.1 million.

In Riverside County, the hardest hit areas were the communities of Palm Desert, Rancho Mirage, and Indian Wells along the western edge of Coachella Valley. Two training levees above Palm Desert broke under the impact of runoff from the Santa Rosa and San Jacinto Mountains. Six homes were destroyed and over 800 damaged in these areas, but no lives were lost. Damage to crops and farmland was extensive and was estimated at \$11.5 million. The Coachella Valley County Water District sustained an estimated \$2.34 million damage to its facilities. Total damage in Riverside County was estimated at \$38.5 million.



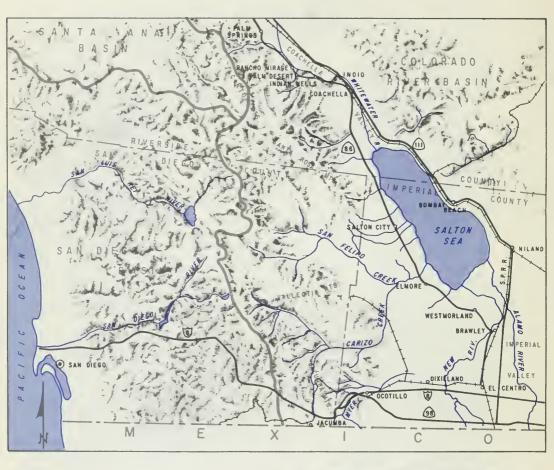
PALM DESERT, SEPTEMBER 11, 1976

Haystack Road neor Alamo Drive

The soil and foundations swept away here were deposited farther "downstream" resulting in more damage.

> Photo by Coachella Valley Water District

## FOR SEPTEMBER 1976 STORM DAMAGE.



### PALM DESERT, SEPTEMBER 11, 1976

Silt and debris 6-8 feet deep buried seven pumps and most of the control house of this domestic water supply plant.

Photo by Coachella Valley Water District



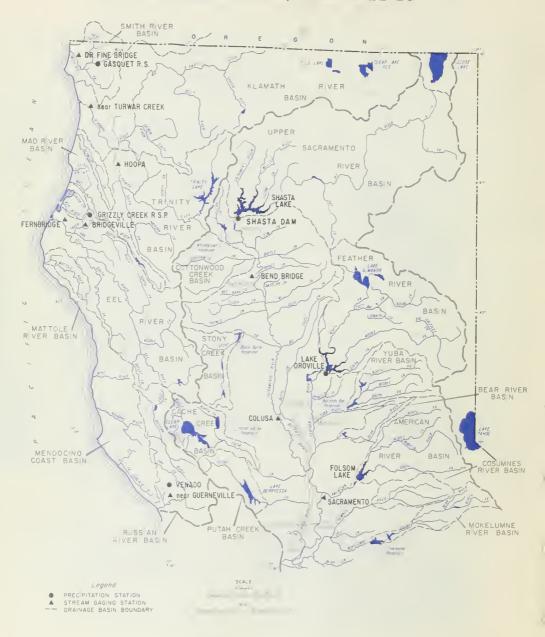
In San Diego and San Bernardino Counties, damage was not as extensive as in Imperial and Riverside Counties. Losses were primarily in agricultural crops and were estimated at \$1.14 million in San Diego County, and \$4.37 million in San Bernardino County. In southeastern San Diego County, flood waters from Mexico swept through farms and camp areas near Jacumba; equipment and buildings on one farm were reportedly destroyed by the force of the flash flood, while other farms sustained heavy crop damage.

Riverside and Imperial Counties were declared disaster areas by Governor Brown on September 13, and by President Ford on September 21. On September 22, the Governor declared San Diego and San Bernardino Counties disaster areas. The Governor's declaration makes State funds available to local agencies through the Natural Disaster Act for restoration of public real property such as road, bridges, flood control works, etc.; the President's declaration makes federal funds available to individual homeowners, farmers, and businessmen who suffered damage caused by the storm.

For communities along the shores of Salton Sea, the subsidence of the flash floods produced by Kathleen did not end the flood problems. As the flood waters found their way to the Sea, it's surface continued to rise, and was further aggravated when another rainstorm hit the area two weeks later. Sandbagging efforts in the eastern lakeshore communities of Bombay Beach and Niland failed to prevent flooding. Salton City, on the other side of the Sea, also reported flooding from the rising sea.

Following the passage of Kathleen, a low pressure center remained off the Southern California coast and continued to generate thunderstorm activity through the remainder of September. On September 23-24, two weeks after Kathleen, rains again caused flash-flooding in the southern desert regions. Riverside County sustained flood damage estimated at \$3.9 million with \$1.1 million to public streets, roads, and bridges, and \$2.8 million to private property--most of which was classified as agricultural damage. Palm Desert was the hardest hit community, but Rancho Mirage and La Ouinta also sustained extensive flood damage. In addition to flooded streets and county roads, many of the major highways in the desert areas were closed by flooding, mudslides, or bridge washouts. The September 23-24 stc.m also caused considerable flood damage in San Bernardino County adding to the problems inflicted by Kathleen.

## FIGURE 21. NORTHERN CALIFORNIA REFERENCE MAP FOR HYDROGRAPHS, FIGURES 22-25



On October 1, President Ford amended the earlier disaster declaration in Riverside and Imperial Counties to include the damage caused by the September 23-24 storms, and to declare San Bernardino County as a disaster area.

During the last week of September, the thunderstorm activity moved northward into the San Joaquin Valley, the Central Coastal, San Francisco Bay, and North Coastal areas. Mud slides, power outages, and local flooding were prevalent along the path of the thunderstorm activity, but the major damage caused by these late rains were to agricultural crops ready for harvest. The most severe local flooding occurred in the community of Mendota in central San Joaquin Valley when Panoche Creek invaded the town. The most severe crop damage was to the grape and raisin crops of San Joaquin and Napa Valleys, and the lettuce and other vegetable crops of Salinas and smaller Central Coastal Valleys.

By October 3, 1976, the low pressure cell off the Southern California Coast that had generated all the September flash flood activities had dissipated and was replaced by the normal "summertime" high pressure--not an encouraging sign for the first month of the new water year.



Signs and sandbags were out again Thursday as flood water from the Panoche Hills hit the Mendota area.

Bee Photo by Ryan Marty

### **Runoff Takes Expected Course**

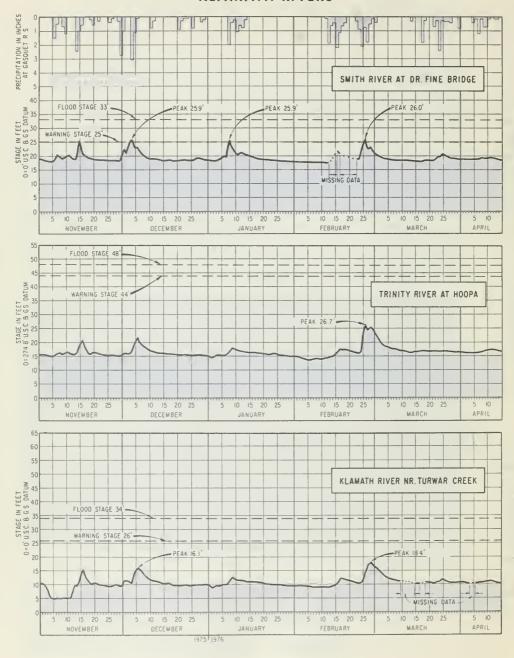
**SEPTEMBER 30, 1976** 

## Flood Pours Into Mendota

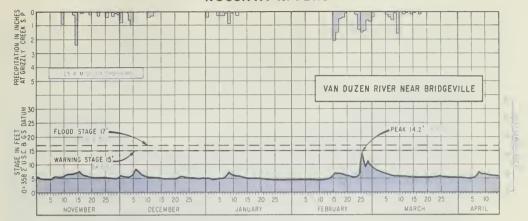
By CHARLES WRIGHT Bee Staff Writer the natural terrain blocked the creek's natural path to the San Joa-

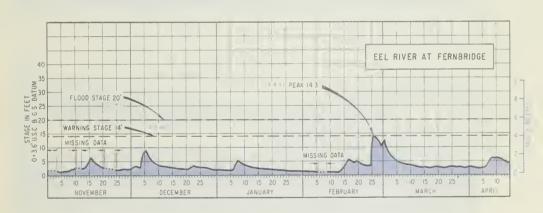
Thursday morning when the he runoff from the western footi splashed against a culvert under

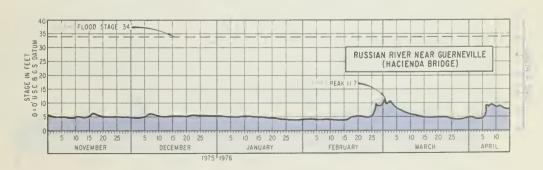
## FIGURE 22. HYDROGRAPHS OF SMITH, TRINITY AND KLAMATH RIVERS



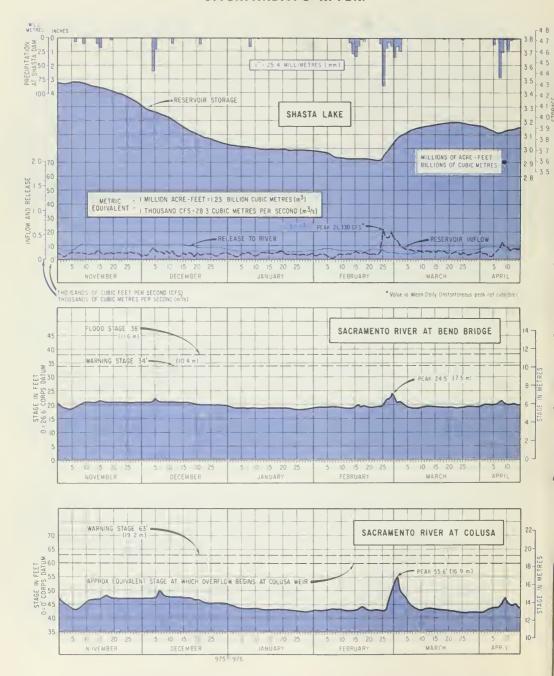
## FIGURE 23. HYDROGRAPHS OF VAN DUZEN, EEL, AND RUSSIAN RIVERS



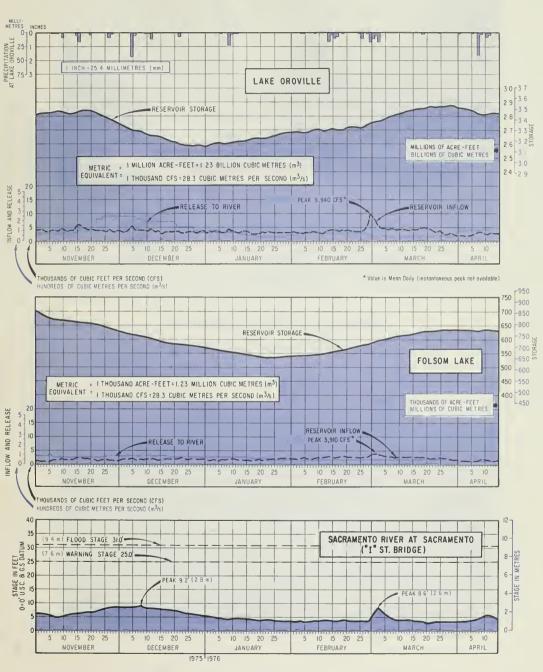




## FIGURE 24. HYDROGRAPHS OF SHASTA LAKE AND SACRAMENTO RIVER.



## FIGURE 25. HYDROGRAPHS OF LAKE OROVILLE, FOLSOM LAKE, AND SACRAMENTO RIVER





BY THE BAY-A whitened street in the Oakland hills after snaw fell in the San Francisco area for the second time this year.

# New Storm Brings Snow to S.F., Rain Over Southland

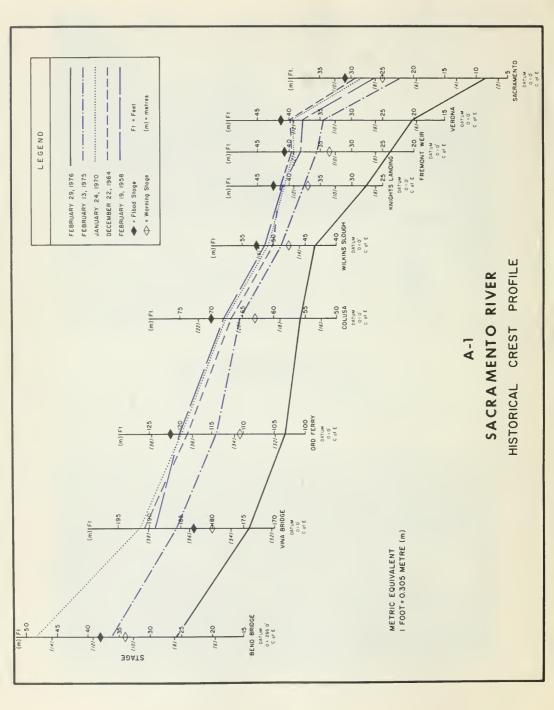
A cold starm, Morch 1-3, 1976, brought precipitation over most of the State. The low snow line brought a beloted breath of winter to such unlikely locations as the San Francisco Bay area, and the Sutter Buttes of the Sacromento Valley.



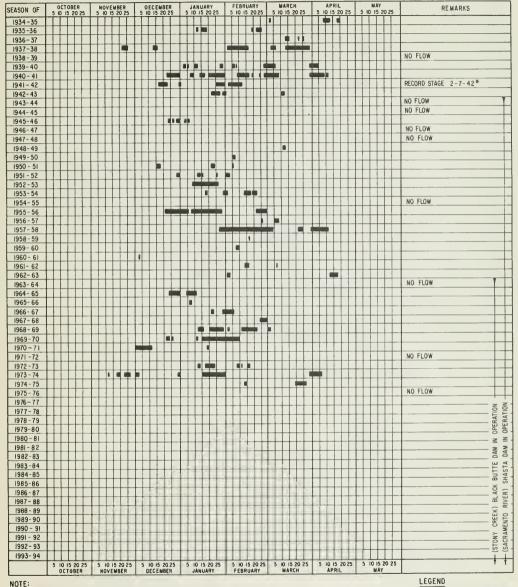
A rare snowfall yesterday dusted the 2,100-foot Sutter Buttes near Marysville.

### APPENDIX A

Sacramento River Crest and Weir Overflow Records



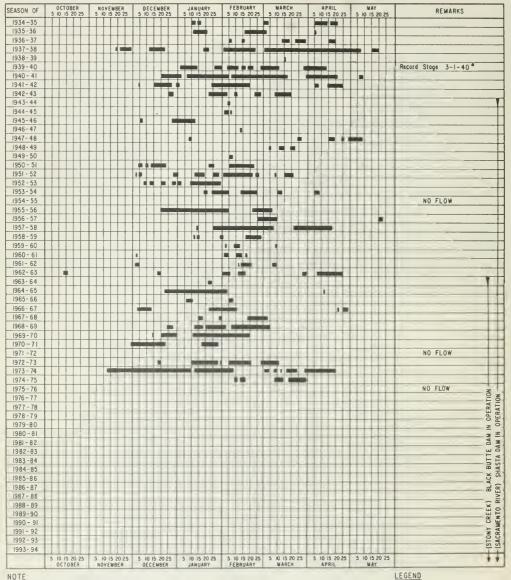
### A-2, PERIOD OF RECORD OF OVERFLOW OF THE MOULTON WEIR



NOTE:
Date compiled from records of D.W.R. stream gaging station Sacramento River at Moulton Weir
Datum: 0=0 U.S.E.D.
Period of record: 1935 to present
Creat elevotion=76.75 feet (23 41 metres)

Metric Equivolent: I FOOT = 0.305 METRES LEGEND
Designates periods of flow over weir
\* 83 8 feet
(25.6 metres)

### A-3, PERIOD OF RECORD OF OVERFLOW OF THE COLUSA WEIR



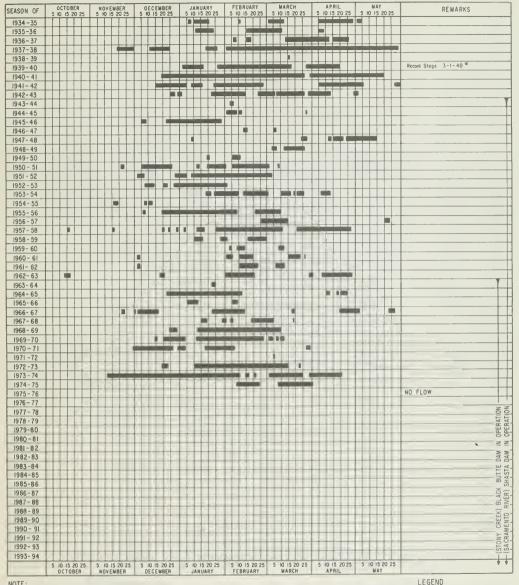
Data compiled from records of D.W.R. stream gaging station. Sacramento River at Colusa Weir Datum. O = 0  $^{\circ}$  U.S.E. D.

Period of record: 1935 to present

Crest elevation 61 80 feet (18 85 metres)

Metric Equivalent: | FOOT = 0 305 METRES Pasignotes periods of flow over welr 70.6 teet (21.5 metres)

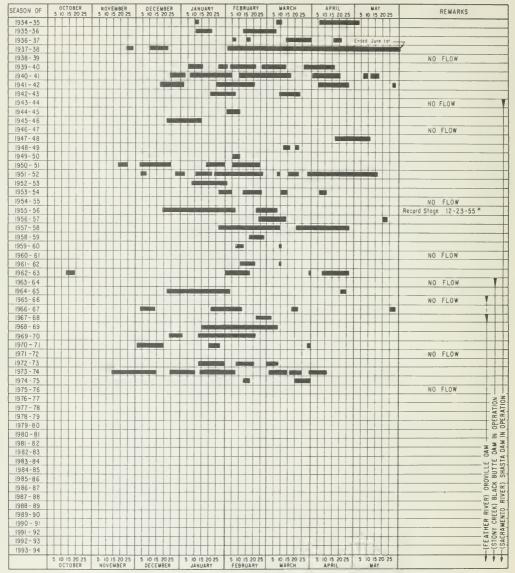
### A-4. PERIOD OF RECORD OF OVERFLOW OF THE TISDALE WEIR



NOTE:
Data compiled from records at D.W.R. stream gaging station. Sacramento River at Tisdala Weir.
Datum. 0=0' U.S.E.O.
Period of records: 1935 to present.
Crest elevation = 45.45 feet (13.86 metres)

Metric Equivalent: 1 FOOT = 0.305 METRES Designates periods of flow over weir \*53 3 feet {16.3 metres}

### A-5, PERIOD OF RECORD OVERFLOW OF THE FREMONT WEIR.



NOTE:

Data compiled from records of D W R streom gaging station "Socromenta River at Freemant Weir, West End"

Dotum : 0 = 0' U.S E D

Period of record 1934 to present

Crest elevation = 33 50 feet (10 22 metres)

Metric Equivolent'
I FOOT = 0 305 METRES

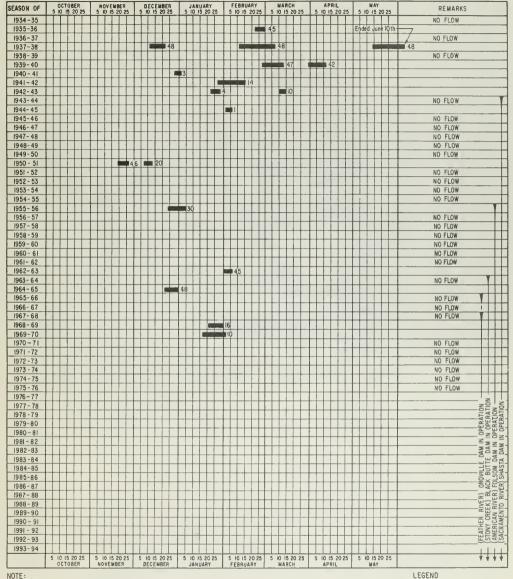
LEGEND
Designates periods of flow over weir
\* 39 7 feet

STATE OF CALIFORNIA
THE RESOURCES AGENCY

(12 | metres)

DEPARTMENT OF WATER RESOURCES

### A-6, PERIOD OF RECORD OF OVERFLOW OF THE SACRAMENTO WEIR

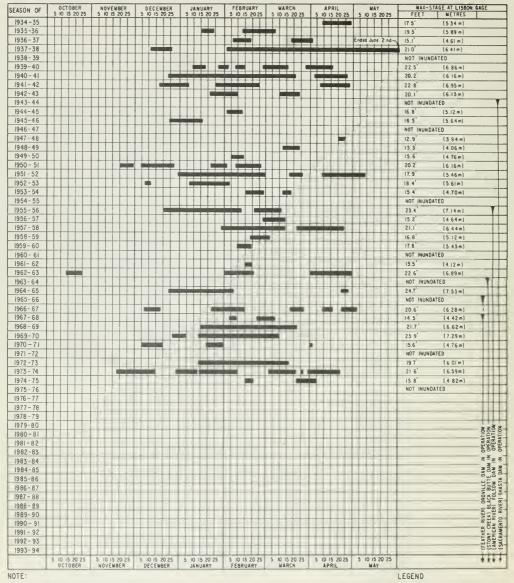


Data campiled from records of D.W.R. stream gaging station "Sacramento Weir Spill to Yolo Byposs, near Sacramento. Datum: 0=0' U.S.E.D. Period of record. 1926 to present Crest elevation = 24.75 feet (7.55 metres) Elevation of top of gates = 310 feet (9.46 metres)

Metric Equivalent: I FOOT = 0.305 METRES LEGEND

Designates periods of flaw over weir **5** and tatal number of gates opened.

### A7. PERIOD OF RECORD OF INUNDATION OF THE YOLO BYPASS



Data compiled from records of DWR stream gaging station "Yola Bypass near Lisbon."

Datum | O=U,S.E D. Datum

Periad of Record | 1914 to Present

Assumed overflow of Bypass at stage above  $11.5^{\circ}$  ( 3.51 metres) an the Lisbon gage

Metric Equivalent | 1 FOOT = 0.305 METRES STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

Designates period of inundation of Bypass

### APPENDIX B

Peak Flows and Stages
at
Selected Streams and Stations in California

### INTRODUCTION

Appendix B presents data for selected stations on representative streams of the major hydrogrologic basins of California (Figure 2). Historic data are obtained from USGS Surface Water Records, Department of Water Resources' Bulletin No. 130, and U. S. Department of Commerce, NOAA, National Weather Service, Daily River Stage publications. Current water year data, obtained from USGS and DWR, are preliminary and are subject to revision.

Stations are listed in a downstream direction along the main stream and tributaries. Stations on tributaries are listed between main stream stations in the order in which the tributaries enter the main stream.

LEGEND FOLLOWS TABLES

### PEAK FLOW AND STAGES (ENGLISH UNITS)

1 . 0	RAINAGE		SOURCE		OF RECORD		:	1975=1976 WATER YEAR	
		. OF . RECORD	. OF . RECORD		STAGE . IN FEET ,		. DATE .	STAGE , IN FEET .	OISCHARGE IN CFS
******************			NORT	H COASTAL A	RFA				
SMITH RI	VER BASI	N							
SMITH RIVER NEAR CRESCENT CITY	609	1931=	USGS	12-22-64	48.5	228,000	2-26-76	24.97	45,400
KLAMATH			0303	15-25-04	40.5	220,000	2-20-10	24.77	45,400
SHASTA RIVER		1933-41							
NEAR YREKA	793	1944-	U\$GS	12-22-64	12.9 13.9(A)	21,500	2-26-76	4.38	550
SCOTT RIVER NEAR FORT JONES	653	1941-	USGS	12-22-64	25,3(AC)	54,600	11-15-75	9.76	3,120
KLAMATH RIVER NEAR SEIAO VALLEY	6980	1912-25	USCS	12-23-64	33.8(A)	165,000	12 -6-75	9.09	10,300
SALMON RIVER AT SOMESBAR	751	1911-15 1927-	USGS	12-22-64	46,6(A)	133,000	2-20-76	9.00	7,800
KLAMATH RIVER AT ORLEANS	8475	1927-	USGS	12-22-64	T6.5(AC)	307,000	2-28-76	12.98	29,500
TRINITY RIVER ABOVE COFFEE CREEK NEAR TRINITY CENTER		1957-	USGS	12-22-64	12,3 13,4(A)	20,800	5 -8-76 0 0 0	4.60	1,730
TRINITY RIVER AT LEWISTON	728	1911-	USGS	12-22-55	27.3(AC)	71,600	1-21-76	4.82	1,060
NORTH FORK TRINITY RIVER AT MELENA	151	1911-13 1957-	USGS-OWR	12-22-64	27.9(A)	35,800	11=15=75	11.85	3,030
TRINITY RIVER NEAR BURNT RANCH	1439	1931-40 1956-	USGS	12-22-55	43.2(A)	172,000	2=26=76	8 + 9 2	5,560
TRINITY RIVER AT HOOPA	2865	1911-14 1916-18 1931-	USGS	12=22=64	40.3(AC)	231,000	2-26-76	26.71	30,100
KLAMAIM RIVER NEAR KLAMAIH		1910-26 1950-	USGS	12-23-64	55.3(A)	557,000	2-28-76	10.37	02,800
REOWOOD	CREEK BA	SIN							
REDWOOD CREEK AT DRICK	278	1911-13 1953-	USGS	12-22-64	24.0(A)	50,500	2-28-76	13.48	11,700
LITTLE R	IVER BAS	IN							
LITTLE RIVER NEAR TRINIDAD	44	1955=	USGS	1-22-72	14.08 15.7(A)	9,720	11-15-75	7.67	3,700
MAO RIVE	R BASIN								
MAD RIVER NEAR FOREST GLEN	143	1953-	USGS	12=22=55	24,5(A)	39,200	2-29-76	7.95	3,770
MAO RIVER NEAR ARCATA	485	1910-13	USGS	12=22=55	29.8	77,000	2-26-76	13.41	15,700
EEL RIVE	R BASIN								
EEL RIVER BELOW SCOTT OAM NEAR POTTER VALLEY	290	1922-	USGS	12-22-64	24.2(A)	56,300	10 -1-75	4.64	320
EEL RIVER AT VAN ARSDALE DAM NEAR POTTER VALLEY	349	1909-	USGS	12=22=64	33.9(A)	64,100	2=29=76	10.58	1,950
OUTLET CREEK NEAR LONGVALE	161	1956=	USGS	12-22-64	30,6(A)	77,900	2-26-76	11.16	6,920
BLACK BUTTE RIVER NEAR COVELO	162	1951=	U3G3	12-22-64 12-11-37	26.4(A) 36.2(AC)	29,000	STATION 0 0 0	OISCONTINUE	

12-22-64

33.6(A) 133,000

2-26-76

16.05

18,200

248 1953- USGS

NORTH FORK EEL RIVER NEAR MINA

### PEAK FLOW AND STAGES (METRIC UNITS)

I	DRAINAGE		SOURCE	PRE	VIOUS MAXIMU DF RECORD	JM	•	1975-1976 WATER YEAR	
I STREAM AND STATION .		RECORD	RECORD	DATE .	STAGE . IN METRES .	DISCHARGE IN M3/S	. DATE .	STAGE . IN METRES .	DISCHARGE IN M3/S
	•••••				••••••		•••••••		
04274	RIVER BASI		NDRTI	H COASTAL A	AREA				
SMITH RIVER	KIVEK BASI	IN							
NEAR CRESCENT CITY	1577	1931-	USGS	12-22-64	14.8	6,460	2-26-76	7.61	1290
	H RIVER 8A	SIN							
SHASTA RIVER NEAR YREKA	2053	1933-41 1944-	USGS	12-22-64	3.9 4.2(A)	608	2-26-76	1.34	15
SCOTT RIVER NEAR FORT JONES	1691	1941-	USGS	12-22-64	7.7(AC)	1,550	11-15-75	2.97	88
KLAMATH RIVER NEAR SEIAD VALLEY	18078	1912-25 1951-	USGS	12-23-64	10.3(A)	4,670	12 -6-75	2.77	291
SALMON RIVER AT SOMESBAR	1945	1911-15	USGS	12-22-64	14.2(A)	3,770	2-28-76	2.74	220
KLAMATH RIVER AT DRLEANS	21950	1927-	USGS	12-22-64	23,3(AC)	8,690	2-28-76	3.96	835
TRINITY RIVER ABOVE COFF CREEK NEAR TRINITY CENT		1957-	usgs	12-22-64	3.7 4.1(A)	588	5 -8-76	1.40	48
TRINITY RIVER AT LEWISTUN	1885	1911-	USGS	12-22-55	8.3(AC)	2,030	1-21-76	1.47	30
NORTH FORK TRINITY RIVER AT HELENA	391	1911=13 1957=	USGS-DWR	12-22-64	8,5(A)	1,010	11-15-75	3.61	85
TRINITY RIVER NEAR BURNT RANCH	3726	1931-40 1956-	USGS	12-22-55	13,2(A)	4,870	2-26-76	2.12	157
TRINITY RIVER AT HODPA	7420	1911-14 1916-18 1931-	USGS	12-22-64	12.3(AC)	6,540	2-26-76	8.14	852
KLAMATH RIVER NEAR KLAMATH	31339	1910-26 1950-	USGS	12-23-64	16.9(A)	15,800	2-28-76	5.60	2340
REDWO	D CREEK B	ASIN							
REDWDDD CREEK AT ORICK	720 E RIVER BA		USGS	12-22-64	7.3(A)	1,430	2-28-76	4.11	1331
LITTLE RIVER	. KIVEK DA	214							
NEAR TRINIDAD	113	1955-	USGS	1-22-72	4.38 4.8(A)	275	11-15-75	2.34	104
	IVER BASIN								
MAD RIVER NEAR FOREST GLEN	370	1953-	USGS	12-22-55	7.5(A)	1,110	2-29-76	2.42	106
MAD RIVER NEAR ARCATA	1256	1910-13 1950-	USGS	12-22-55	9.1	2,200	2-26-76	4.09	444
EEL R	IVER BASIN								
EEL RIVER BELDW SCOIT DO NEAR POITER VALLEY	751	1922-	USGS	12-22-64	7.4(A)	1,590	10 -1-75	1.41	9.1
EEL RIVER AT VAN ARSDALI DAM NEAR POTTER VALLEY	903	1909-	USGS	12-22-64	10.3(A)	1,820	2-29-76	3.22	55
OUTLET CREEK NEAR LONGVALE	416	1956-	USG5	12-22-64	9,3(A)	2,210	2-26-76	3.40	252
BLACK BUTTE RIVER NEAR COVELD	420	1951-	USGS	12-22-64	8.0(A)	0,821	STATION	DISCONTINUE	D
				12-11-37	11,0(AC)				

2-26-76 4.89

515

642 1953- USGS 12-22-64 10,2(A) 3,770

NDRTH FORK EEL RIVER NEAR MINA

1		. PREVIOUS MAXIMUM		1975-1976
1	. DRAINAGE . PERIOO . SOURCE	OF RECORD		WATER YEAR I
1 STREAM AND STATION		,		
1	. SO MILES . RECORD . RECORD	D . DATE . STAGE . OISCHAR		. IN FEET . IN CFS I
1	, , , , , , , , , , , , , , , , , , , ,	. IN PEEL . IN CP	J .	. 14 -664 . 14 673 1

			NORT	H COASTAL A	REA (CONTIN	UEØ)			
ı	EEL RIVER BASIN (CONTINUED)								
EEL RIVER AT FORT SEWARD	2107	1955=	USGS	12-22-64	87.2(AC)	561,000	2-26-76	26.72	57,200
SOUTH FURK EEL RIV NEAR MIRANDA	ER 537	1939=	USGS	12-22-64	46.0(A)	199,000	2-26-76	20.94	48,300
NEAR WEOTT	28	1960=	USGS	12-22-64	20.6(AC)	6,520	2-26-76	7.67	1,620
EEL RIVER AT SCUTIA	3113	1910=	USGS	12=23=64	72.0(4)	752,000	2-26-76	29.68	114,000
VAN DUZEN RIVER NEAR BRIDGEVILLE	222	1950=	USGS	12=22=64	24.0(A)	48,700	2=26=76	14.15	16,400
	MATTOLE RIVER HA	31N							
MATTOLE RIVER NEAR PETROLIA	240	1911-13	USGS	12-22-55	29,6(0)	90,400	2-26-76	14.54	21,100
	NOYO RIVER BASIN								
NOYO RIVER NEAR FORT BRAGG	106	1951=	USGS	12-22-64	26.3	24,000	2-26-76	11.81	3,510
	NAVARRO RIVER BA	SIN							
NAVARRO RIVER NEAR NAVARRO	303	1950-	USGS	12-22-55	40.6(0)	64,500	3 =1=76	7.85	2,790
	RUSSIAN RIVER BA	SIN							
RUSSIAN RIVER NEAR UKIAH	100	1911=13 1952=	USGS	12-21-55	21.0	18,900	3 -1-76	4.69	2,350
EAST FORK RUSSIAN NEAR CALPELLA	RIVER 92	1941=	USGS	12-22-64	20.2	18,700	2=29=76	11.48	2,200
RUSSIAN RIVER NEAR HOPLAND	362	1939=	USGS	12-22-55	27.0 30.0(A)	45,000	2-29-76	9.75	4,070
RUSSIAN RIVER NEAR CLOVEROALE	503	1951=	USGS	12-22-64	31.6(0)	55,200	2-29-76	8.58	4,400
RUSSIAN RIVER NEAR HEALDSBURG	793	1939=	USGS	12-23-64	27.0 30.8(A)	71,300	2-29-76	5.57	4,560
DRY CHEEK NEAR CLOVERDALE	8.8	1941=	USGS	12-22-64	18.1	18,100	2=29=76	4.65	840
DRY CREEK NEAR GEYSERVILLE	162	1959=	USGS	1-31-63	17.5	32,700	2=29=76	4.80	1,630
RUSSIAN RIVER NEAR GUERNEVILLE (HACI		1939=	USGS	12-23-64	49.6(A) 49.7(A)	93,400	3 =1=76	11.74	5,260
			SAN	FRANCISCU E	SAY AREA				
	WALKER CREEK BAS	SIN							
MALKER CREEK NEAR IOMALES	37	1959=	USGS	1-16-73	22.9	6,600	3 =2=76	5.89	150
	CORTE MADERA CRE	EEK BASIN							
CORTE MADERA CREEK AT ROSS	1.8	1951-	USGS	12-22-55	17.5	3,620	10 =9=75	8.37	330
	NUVATO CREEK BA	SIN							
NOVATO CREEK NEAR NUVATO	18	1946-	USGS	1=14=70	11.0	2,000	2-29-76	3.64	7 0

### PEAK FLOWS AND STAGES (CONTINUED) METRIC UNITS

					METRIC UNITS	3				
I I I SIREAM AND STATE	DRAI			SOURCE	. PRE	VIOUS MAXIMU OF RECORD		W	1975-1976 ATER YEAR	I
I I	. 30 1	KM ,	RECORD	HECORO	DATE .	STAGE . IN METRES .	OISCHARGE . IN M3/S .	DATE . S	TAGE .	DISCHARGE I IN M3/S I
				NORT	H COASTAL A	REA (CONTINU	JED)			
	EEL RIVER 8 (CONTINUEO									
EEL HIVER AT FORT SEWARD		5457	1955-	USGS	12=22=64	26.6(AC)	15 900	2-26-76	8.14	1620
SOUTH FORK EEL HIV NEAR MIRANDA		1390	1939-	USGS	12-22-64	14.0(A)	5 640	2=26=76	6.38	1370
BULL CHEEK NEAR WEOTT		72	1960=	USGS	12-22-64	6.3(AC)	184	2-26-76	2.34	45
EEL HIVER AI SCUTIA		8062	1910-	USGS	12-23-64	21.9(A)	21 300	2-26-76	9.05	3230
VAN DUZEN RIVER NEAR BRIOGEVILLE		574	1950-	USGS	12-22-64	7.3(A)	1 380	2-26-76	4.31	464
	MATTOLE RIV	ER 84	SIN							
MATTOLE RIVER NEAR PETROLIA		655	1911=13 1915=	USGS	12-22-55	9.0(C)	2 560	2=26=76	4.43	597
	NUYO RIVER	BASIN								
NOYO RIVER NEAR FORT BRAGG		274	1951-	USGS	12-22-64	8.0	679	2-26-76	3,60	99
	NAVARRO RIV	ER BA	SIN							
NAVARHO RIVER NEAR NAVARRO		784	1950-	USGS	12-22-55	12.4(C)	1 830	3 -1-76	7.39	79
	RUSSIAN PIV	ER BA	SIN							
RUSSIAN RIVER NEAR UKIAH		259	1911-13 1952-	USGS	12-21-55	6.4	535	3 -1-76	1.43	66
EAST FORK RUSSIAN NEAR CALPELLA	RIVER	238	1941-	USGS	12-22-64	6.2	529	2=29=76	3.50	67
RUSSIAN RIVER NEAR HOPLAND		937	1939=	USGS	12-22-55	A.2 9.1(A)	1 270	2+29=76	2.97	115
RUSSIAN RIVER NEAR CLOVERDALE		1302	1951-	USGS	12-22-64	9.6(C)	1 560	2-29-76	2.62	124
RUSSIAN RIVER NEAR HEALDSBURG		2053	1939-	USGS	12-23-64 1237	8.2 9.4(A)	5 050	2=29=76	1.70	129
DRY CREEK NEAR CLOVERDALE		227	1941-	USGS	12-22-64	5.5	512	2-29-76	1.42	23
ORY CHEEK NEAR GEYSERVILLE		419	1959-	USGS	1=31=63	5.3	917	2-29-76	1.46	46
GUERNEVILLE (HAC	R [ENDA BR.]	3471	1939-	USGS	12-23-64 12-23-55	15.1(A) 15.1(A)	2 640	3 =1=76	3.58	148
				SAN	FRANCISCO I	BAY AREA				
	WALKER CRE	EK BA	SIN							
WALKER CREEK NEAR TOMALES		95	1959=	USGS	1=16=73	7.0	186	3 -2-76	1.80	4.2
	CURTE MADE	RA CR	EEK BASIN	1						
CORTE MADERA CHEE AT RUSS	к	46	1951=	USGS	12-22-55	5.3	102	10 =9=75	2.55	9.3
	NOVATO CRE	EK BA	SIN							
NOVATU CREEK NEAR NOVATO		46	1946=	USGS	1-14-70	3 . 4	56	2-29-76	1,11	2.0

I I I STREAM AND STATI			PERIOD	SOURCE	PRE	1003 MAXIMO OF RECORD	ум		1975-197 mater ye	6
		SQ MILES	, RECDRO	. RECORD	DATE ,	STAGE . IN FEET .				DISCHARGE IN CFS
					FRANCISCO 8/		NTINUEO)			
	SONOMA	CREEK BAS	IN							
SONDMA CREEK AT AGUA CALIENTE		58	1955=	USGS	12-22-55	17,1(0)	8,880	10-27-75	2.94	30
	NAPA RI	VER BASIN								
NEAR ST. HELENA		81	1939-32	USGS	12-22-55	16.2	12,600	2=29=76	2.57	200
NAPA RIVER NEAR NAPA			1929=32	USGS	1-31-63	27.6	16,900	3 -1-76	4.10	320
	PACHECO	CREEK BA	SIN							
SAN RAMON CREEK AT SAN RAMON		6	1952-	USGS	10-13-62	17.0	1,600	2-29-76	85,5	50
	SAN LOF	ENZO CREE	K BASIN							
SAN LORENZO CREEK AT MAYWARD			1939-40 1946-	USGS	10=13-62	19.7(A) 20.8(A)	7,460	10-29-75	6.50	180
	ALAMEDA	CREEK BA	SIN							
ARROYD MOCHO NEAR PLEASANTON		141	1962=	USGS	2- 1-63 I-18-73	8.60(C) 12.4	1,760	2-29-76	8.79	60
ARROYO VALLE NEAR LIVERMORE		147	1912-30 1957-	USGS	12-23-55	13.9(A)	18,200	3-17-76	2.75	40
ARROYO VALLE AT PLEASANTUN		171	1957=	USGS	4- 3-58	25.4	11,300	10 -9-75	7.75	50
ALAMEDA CREEK NEAR NILES		633	1891-	USGS	12-23-55	14.9	29,000	2-29-76	4.13	340
PATTERSON CREEK AT UNION CITY		••	1958=	USGS	2- 1-63	20,4(A)	10,500	3 =2=76	7,93	1,000
	COYOTE	CHEEK BAS	IN							
COYDTE CREEK NEAR MADRONE		196	1902-12	USGS	3- 7-11		25,000	5=26=76	2.46	80
UPPER PENITENCIA ( AT SAN JOSE	REEK	55	1961-	USGS	1-21-67	6.2	15,000	3 -2-76	2.95	3
	GUADALI	PE RIVER	BASIN							
GUADALUPE RIVER AT SAN JOSE		144	1929=	USGS	4- 2-58	16.6	9,150	3 -2-76	3.67	910
SARATOGA CREEK AT SARATOGA		9	1933=	USGS	12-22-55	6.4(C)	2,730	2-29-76	3,00	30
	MATADER	RO CREEK B	ASIN							
MATAGERO CREEK AT PALU ALTO		7	1952-	USGS	2-27-73	5,5	1,100	10-10-75	1.43	80
	SAN FRA	BASIN								
SAN FRANCISQUITO ( AT STANFORD UNIVE			1930-41	USGS	12=22=55	13.6	5,560	10-11-75	0.75	1 0

### PEAK FLOWS AND STAGES (CONTINUED) METRIC UNITS

WEINIC ONLIS												
I . ORAINAGE PERIOD SOURCE . PREVIOUS MAXIMUM . 1975-1976 1 I SIREAM AND STATION . AREA IN . OF . O												
I I	•	SQ KM	. RECORO	RECORO	OATE	STAGE . N MFTRES .	DISCHARGE . IN M3/S .	OATE .	STAGE . C	ISCHARGE I		
					FRANCISCO BA			**********				
	SONOMA	CPEEK RAS	IN	0.11		7 2122 (60)						
SONOMA CREEK AT AGUA CALIENTE		150	1955-	USGS	12-22-55	5,2(0)	251	10-27-75	0.90	n_A		
	NAPA RI	VER BASIN	1									
NAPA RIVER NEAR ST. MELENA			1929-32 1939-	uSGS	12-22-55	4.9	356	2-29-76	0.78	5.7		
NAPA RIVER NEAR NAPA		564	1929-32	USGS	1-31-63	8.4	478	3 -1-76	1,25	9.1		
	PACHECO	CREEK 84	SIN									
SAN RAMON CREEK AT SAN RAMUN		15	1952=	USGS	10-13-62	5,2	45	2-29-76	0.69	0.6		
		ENZO CREE										
SAN LORENZU CREEK AT HAYWARD			1939-40 1946-	USGS	10-13-62 12-22-55	6.0(A) 6.3(A)	211	10-29-75	1.98	5.1		
	ALAMEDA	CREEK BA	ASIN									
ARROYO MOCHO NEAR PLEASANTON		365	1962+	USGS	2- 1-63 1-18-73	2.6(C) 3.8	49 48	2=29=76	2,68	1.7		
ARROYU VALLE NEAR LIVERMORE			1912=30 1957=	USGS	12-23-55	4.2(A)	515	3-17-76	0.84	1.1		
ARROYO VALLE AT PLEASANTON		442	1957•	USGS	4- 3-58	7.7	319	10 -9-75	2.36	0.6		
ALAMEDA CREEK NEAR NILES		1639	1891-	USGS	12=23=55	4.5	821	2-29-76	1.26	9.6		
PATTERSON CREEK AT UNION CITY			1958-	USGS	2= 1=63	6.2(A)	297	3 -2-76	2.42	28		
	COYOTE	CREEK BA										
COYOTE CREEK		507	1902-12	USGS	3- 7-11		707	5-26-76	0.75	2.3		
AT SAN JUSE			1961=	USGS	1-21-67	1.9	424	3 -2-76	0.90	0.1		
	GUADALU	PE RIVER	BASIN									
GUADALUPE RIVER AT SAN JUSE		372	1929-	USGS	4- 2-58	5.1	259	3 -2-76	1.12	25		
SARATUGA CREEK AT SARATUGA			1933-	USGS	12-22-55	2.0(0)	7 <b>7</b>	2-29-76	0.91	0.8		
MATADERD CREEK	MATADER	O CREEK	BASIN									
AT PALO ALTO	SAN EUA	18 INCISQUIT	1952-	USGS	2-27-73	1.7	31	10-10-75	0.44	2.3		
	CREEK											
SAN FRANCISQUITO AT STANFORD UNIT		98	1930-41 1950-	USGS	12=22=55	4.1	157	10-11-75	0.23	0.3		

GEREAM AND COLOR		DRAINAGE		. SOURCE		VIOUS MAXIM OF RECORD		•	1975-19 WATER Y	EAR
I STREAM AND STATIO	:	SO MILES	RECORO	. RECORD	. DATE .	STAGE . IN FEET .	DISCHARGE IN CFS	. OATE .	STAGE IN FEET	. DISCHARGE . IN CFS
					TRAL COASTAL					
R	EDWOOD	CREEK BA	SIN							
REDWOOD CREEK AT REOWOOD CITY		2	1959-	USGS	1-31-63	9.4	644	2-29-76	2.89	60
	ESCADE	RO CREEK	BASIN							
ESCADERO CREEK NEAR PESCADERO		46	1951-	USGS	12-23-55	21.3	9,420	2-29-76	2.39	70
s	AN LOR	ENZO RIVE	R BASIN							
AN LORENZO RIVER AT BIG TREES		111	1936-	USGS	12-23-55	22.6	30,400	2-29-76	5.09	460
8	OQUEL	CREEK BAS	IN							
SOQUEL CREEK AT SOQUEL		40	1951-	USGS	12-23-55	25.3	15,800	2-29-76	3.57	140
	AJARG	RIVER BAS	IN							
BODFISH CREEK NEAR GILHOY		7	1959-	USGS	1-31-63	8.3	1,240	2-29-76	2.81	10
RES PINOS CREEK NEAR TRES PINOS		206	1939-	USGS	4- 4-41	7.8	8,060	4 -4-76	4.21	10
AN BENITO RIVER NEAR HOLLISTER		586	1949-	USGS	4- 3-58	16.3	11,600	10 -9-75	4.90	50
AJARO RIVER AT CHITTENDEN		1186	1939-	USGS	12-24-55 4- 3-58	32.5 33.1	24,000	3 -4-76	1.64	50
CORRALITOS CREEK AT FREEDOM		28	1956=	USGS	12-22-55	15.6(A)	3,620	2-29-76	3.58	170
	ALINAS	RIVER BA	SIN							
MALINAS RIVER NEAR POZO		70	1942-	USGS	1-25-69 1-25-69	13.9(C) 15.5(A)	18,600	2-29-76	10.47	10
BALINAS RIVER ABOVE CREEK NEAR SANTA M			1942-	USGS	1=25=69	14.9	16,600	STATION	DISCONTIN	IUED
JACK CREEK NEAR TEMPLETON		25	1949•	USGS	2-24-69	11.3	8,160	3 •3•76	2.30	10
STRELLA RIVER NEAR ESTRELLA		922	1954-	USGS	2-24-69	10,4(A)	32,500			NO FLOW
SALINAS RIVER NEAR HRADLEY		2535	1948-	USGS	2-24-69	20.3(A)	117,000	1-28-76	6.98	710
ARROYO SECO NEAR SOLEDAD		244	1901-	USGS	4- 3-58	16.4	28,300	3 -1-76	4.29	800
MALINAS RIVER NEAR SPRECKELS		4156	1900=01 1929=	USGS	2-26-69 1-16-52	26.5(C) 26.9(AC)	83,100	10 -7-75	4.54	170
c	ARMEL	RIVER BAS	SIN							
CARMEL RIVER AT ROBLES DEL RIO		193	1957-	USGS	4- 2-58 12-23-55	10.5 11.7(A)	7,100 6,930	3 -2-76	3.83	30
6	IG SUF	R RIVER 8	ISIN							
BIG SUR RIVER NEAR BIG SUR		47	1950-	USGS	4- 2-58	11.6	5,680	2-29-76	4.95	480

### PEAK FLOWS AND STAGES (CONTINUED) METRIC UNITS

					0.55				1075 105	
I I STREAM AND STAT	ION	ORAINAGE	PERIOD	SOURCE	PRE	VIOUS MAXIMU OF RECORD			1975-1976 WATER YFAI	3 I
1 SIREAM AND STAT	1014	AREA IN	RECORD	RECORO	DATE .	STAGE . IN METRES .	DISCHARGE . IN M3/S .	OATE .	STAGE . IN METRES .	DISCHARGE I IN M3/S I
				CENI	IRAL COASTAL	AREA				*************
	REOWOO	D CHEEK HA	SIN							
REDWOOD CREEK		5	1959=	USGS	1=31=63	2.9	18	2-29-76	0.88	1.7
AT NEUNOOD CITY	PESCAD	DERO CREEK		0000	1-31-03	6.7	10	2-24-710	0,00	1.7
PESCAUERO CREEK NEAR PESCADERO		119	1951=	USGS	12-23-55	6.5	266	2-29-76	0.73	2.0
	SAN L	DRENZO RIVE								
SAN LURENZO RIVER AT BIG TREES		207	1936=	USGS	12=23=55	6.9	860	2-29-76	1.55	13
at old thees	SOQUEL	CREEK BAS		0383	12-23-33	0,4	780	2-24-16	1.55	13
SOUUEL CREEK										
AI SUDUEL	DA IADO	104 D RIVER 8AS	1951=	USGS	12=23=55	6.8	447	2-29-76	1.09	4.0
BOOFISH CREEK	PAJAR	N KINEK OMS	IN							
NEAR GILRDY		18	1959-	USGS	1=31=63	2.5	35	2=29=76	0.86	0.3
TRES PINOS CREEK NEAR TRES PINOS		533	1939=	USGS	4- 4-41	2.4	228	4 -4-76	1.28	0.3
SAN BENITO RIVER NEAR HOLLISTER		1517	1949-	USGS	4- 3-58	5.0	328	10 -9-75	1.49	1.4
PAJARU RIVER AT CHITTENDEN		3071	1939-	USGS	12-24-55	9.9	679	3 -4-76	0.50	0.6
CURRALITOS CHEEK					4- 3-58	10.1				
AT FREEDOM		72	1956=	USGS	12=22=55	4.8(A)	102	2-29-76	1.09	4.8
	SALIN	AS RIVER PA	SIN							
SALINAS RIVER NEAR POZO		181	1942-	USGS	1=25=69	4.2(C) 4.7(A)	526	2-29-76	3,19	0.3
SALINAS HIVER ABO CHEEK NEAR SANTA			1942-	USGS	1=25=69	4.5	469	STATION	DISCONTINUE	0
JACK CREEK										
NEAR TEMPLETUN		64	1949-	USGS	2-24-69	3,4	231	3 -3-76	0.70	0.3
NEAR ESTHELLA		2387	1954-	USGS	2-24-69	3.2(A)	920			NO FLOW
SALINAS HIVER NEAR BRADLEY		6565	1948-	USGS	2=24=69	6.2(A)	3 310	1-28-76	2.13	20
ARMOYU SECU NEAR SULEDAD		631	1901-	USGS	4- 3-58	5.0	801	3 -1-76	1.31	55
SALINAS RIVER NEAR SPHECKELS			1900-01	USGS	2-26-69	8.1(0)	2 350	10 -7-75	1./38	4.8
	CARMEI	L RIVER BAS	IN		1=16=52	A.2(AC)				
CARMEL HIVER	.0		1957=	11000			201	7 . 7 . 7		
A KOBECS OFF KI	U	499	1457*	USGS	4- 2-58 12-23-55	3.2 3.6(A)	201 196	3 =2=76	1.17	0.8
	BIG S	UR RIVER HA	SIN							
BIG SUR RIVER NEAR BIG SUR		121	1950-	USGS	4- 2-58	3.5	160	2-29-76	1.51	13

I I	DRAINAGE AREA IN SO MILES	PERIOD OF RECORD	SOURCE	PREVIOUS MAXIMUM OF RECORD			. 1975-1976 . WAIER YEAR		
			RECORD	. DATE .	STAGE . IN FEET .	DISCHARGE .	DATE .	STAGE .	OISCHARGE IN CFS
			CENT	IRAL COASTAL	AREA (CONT	INUED)			
ARROYO	DE LA CRU	Z BASIN							
RROYO DE LA CRUZ NEAR SAN SIMEON	41	1950-	USGS	12- 6-66	15,3	35,200	3 =2=76	2.91	210
SISQUOC RIVER	MARIA RIVE	R BASIN							
NEAR GAREY	471	1940-	USGS	1-25-69	13.0	24,500	2-10-76	4.73	390
SANTA MARIA RIVER AT GUADALUPE	1741	1940-	USGS	1-16-52	8,2(0)	32,800			NO FLOW
SANTA	YNEZ RIVER	HASIN							
SANTA YNEZ RIVER BELOW GIBRALTAH OAM NEAR SANTA BARBARA	216	1920-	USGS	1-25-69	25.8	54,200	2 -9-76	7.72	30
SANTA CRUZ CREEK NEAR SANTA YNEZ	74	1941=	USGS	2-24-69	14.5(A)	7,050	2 =9=76	8.52	290
	SE CREEK B		0000	2-24-07	14,3(2)	1,050	2 - 4 - 7 0	0.52	270
SAN JOSE CREEK NEAR GOLETA	6	1941-	USGS	1-25-69	10.1	2,000	2 =9=76	4.47	190
ATASCA	OERO CREEK	BASIN							
ATASCADERO CREEK	19	1941-	USGS	4 25 40			2 0 1		
NEAR GOLETA	TERIA CREE		0568	1-25-69	13.0	5,230	2 -9-76	3.56	660
CARPINTERIA CREEK									
NEAR CARPINTERIA	13	1941-	USGS	12-27-71	14.1(A)	8,880	2 -9-76	2.47	230
VENTUR	A CREEK BA	SIN	800	TH COASTAL A	HEA				
MATILIJA CREEK									
AT MATILIJA HOT SPRINGS	55	1927=	USGS	1-25-69	16.5	20,000	2-10-76	4.33	530
VENTURA RIVER NEAR MEINERS DAKS	76	1959=	USGS	1-25-69		28,000(E)	2 -9-76	3.31	90
COYOTE CREEK NEAR DAK VIEW	13	1958-	USGS	1-25-69	12.0	8,000	2 -9-76	7.11	690
VENTURA RIVER NEAR VENTURA	188	1911-14	USGS	1-25-69	24.3(A)	58,000	9-30-76	8.56	1,200
SANTA	CLARA PIVE	R BASIN							
SAN CLARA RIVER AT LOS ANGELES-VENTURA CO. LIM	IE 644	1952=	USGS	1-25-69	19.0	68,800	2 -9-76	5,32	1,910
PIRU CREŁK ABOVE LAKE PIRU	372	1955=	USGS	2-25-69	18.6(A)	31,200	2 -9-76	5.56	760
SESPE CREEK NEAR FILLMORE	251	1911-13 1927-	USGS	1-25-69	20.8 25.0(A)	60,000	2 =9=76	14.39	3,650
SANTA PAULA CREEK NEAR SANTA PAULA	40	1927=	USGS	2-25-69	(A)\$,21	21,000	2 =9=76	7.96	490
	J CREEK BAS	SIN							
MALIBU CREEK AT CRATER ( NEAR CALABASAS	105	1931-	USGS	1-25-69	21.4	33,800	2 -9-76	3.78	340
BALLON	A CREEK BA	1311							
HALLONA CREEK NEAR CULVER CITY	90	1928=	USGS	11-21-67	14.9	32,500	9-10-76	9.50	14,580

					METRIC ONLIG					
I I I STREAM AND STATE	ION	DRAINAGE AREA IN	PER100		. PREV	IOUS MAXIM OF RECORD	UM .		1975-1976 WATER YEAR	R I
I I		. SG KM	RECORO	. RECORO	DATE .	STAGE . N METRES .	DISCHARGE . IN M3/S .	DATE .	STAGE . IN METRES .	OISCHARGE I IN M3/8 T
		•••••			RAL COASTAL	ADEA (CONT	100000			
	ARROY	D DE LA CRU	Z BASIN	CEIVI	MAE CONSTAL	AREA (CONT	14050)			
ARROYU OE LA CHUZ										
NEAR SAN SIMEUN	DANTA	MARIA RIVE	1950-	USGS	12- 6-66	4.7	996	3 -2-76	0.89	5.9
SISQUOC RIVER	SANTA	MAKIA KIVE	CASIN							
NEAR GAREY		1219	1940-	USGS	1-25-69	4.0	693	2-10-76	1.44	11
SANTA MARIA RIVER AT GUADALUPE		4509	1940-	USGS	1=16=52	2.5(0)	928			NO FLOW
	SANTA	YNEZ RIVER	BASIN					-		
SANTA YNEZ RIVER BELOW GIBRALTAR I NEAR SANTA BARBAI	O A M R A	559	1920-	USGS	1=25=69	7.9	1 530	2 =9=76	2.35	0.8
SANTA CRUZ CREEK NEAR SANTA YNEZ		191	1941-	usas	2=24=69	4.4(A)	199	2 -9-76	2.60	8.2
MEAN OWNER THEE	SAN J	OSE CREEK B		0000	2-24-07	4,4(4)	1.7	2 -7-70	2,00	0.2
SAN JUSE CREEK										
NEAR GOLETA		15	1941-	USGS	1-25-69	3.1 3.9	56	2 -9-76	1.36	5.4
	ATASC	ADERO CREEK	BASIN							
ATASCADERO CREEK NEAR GOLETA		49	1841-	USGS	1-25-69	4.0	148	2 -9-76	1.09	18
	CARPI	NTERIA CREE	K BASIN							
CARPINTERIA CHEEK NEAR CARPINTERIA		33	1941-	USGS	12-27-71	4.3(A)	251	2 -9-76	0.75	6.5
				S0U1	H COASTAL AF					
	VENTU	RA CREEK BA	SIN							
MATILIJA CREEK AT MATILIJA HOT	SPHING	S 142	1927-	USGS	1=25=69	5.0	566	2-10-76	1.32	15
VENTURA RIVER NEAR MEINERS DAK	s	196	1959=	USGS	1-25-69		792(E)	2 -9-76	1.01	2.5
COYOTE CHEEK		33	1958-	USGS	1-25-69	3.7	226	2 -9-76	2.17	19
VENTURA KIVER NEAR VENTURA		486	1911-14	USGS	1-25-69	7.4(A)	1 640	9-30-76	2.61	33
	SANTA	CLARA RIVE	R BASIN							
SAN CLARA RIVER A ANGELES-VENTURA		NE 1667	1952-	USGS	1=25=69	5.8	1 950	2 -9-76	1.62	54
PIRU CREEK ABOVE LAKE PIRU		963	1955-	USGS	2-25-69	5.7(A)	883	2 -9-76	1.69	21
SESPE CREEK NEAR FILLMORE		650	1911=13 1927=	USGS	1=25=69	6.3 7.6(A)	1 700	2 -9-76	4.39	103
SANTA PAULA CREEK NEAR SANTA PAULA		104	1927-	USGS	2=25=69	4-6(A)	594	2 -9-76	2.43	13
	MALIB	U CREEK BAS				,				
MALIBU CHEEK AT C	RATER		1071-	USGS	1-25-40		057	2 0 7:	4.15	0.4
CACADAJAS	BALLO	NA CREEK BA	1931= SIN	0363	1=25=69	6.5	957	2 =9=76	1.15	9.6
BALLONA CREEK										
NEAR CULVER CITY		233	1928•	USGS	11-21-67	4.5	920	9-10-76	2.90	412

I I STREAM AND STATE	DN . AR	EA IN	. DF	. SOURCE		/10US MAXIMU OF RECORD			1975=197 WATER YE	AR
I I	. 80	MILES	. RECORD	. RECORD		STAGE . IN FEET .	DISCHARGE IN CFS	. DATE .	STAGE . IN FEET .	OISCHARGE IN CFS
				SDUT	H CDASTAL AF	REA (CONTIN	IFD1			
	LOS ANGEL	ES RIVE	R BASIN	0001		(	,,,,			
LUS ANGELES RIVER AI SEPULVEDA DAM		158	1929•	USGS	1-25-69	11.4	13,800	2 -9-76	6.27	5,740
LOS ANGELES RIVER AT LOS ANGELES		514	1929-	USGS	3- 2-38		67,000	2 -9-76	5.89	13,900
NEAR DOWNEY		143	1928-	USGS	1-25-69	15.2	46,900	9-11-76	6.35	9,820
	SANIA ANA	RIVER	8ASIN							
SANTA ANA RIVER NEAR MENTONE		209	1896=	USGS	3- 2-38	14.3(C)	52,300	9-11-76	6.10	1,680
SAN GABRIEL RIVER BELOW SANTA FE DA NEAR BALDWIN PARK		236	1942-	USGS	1-26-69	55.5	30,900	3 =2=76	10.20	3
SANTA ANA RIVER AT NEAR SAN BERNAROS		532	1939-54 1966-	USGS	2-25-69	16.5	28,000			N/A
MILL CREEK NEAR YUCAIPA		42	1919-38 1947-	USGS	1-25-69	16.8(A)	35,400	9-11-76	10.95	5,140
LYTLE CREEK NEAR FONTANA		46	1918-	USGS	1-25-69	15.0(A)	35,900	9-10-76	5.20	400
CAJON CREEK BELOW LONE PINE CREEK		56	1971=	USGS	12-25-71	10.6	0,900	STATION	DISCONTINU	ED
SANTA ANA RIVER AT M.H.D. CRUSSIN	G	854	1970-	USGS	12-29-70	10,9	5,300	9-11-76	15.95	6,700
SAN JACINTO RIVER NEAH SAN JACINTO		141	1920=	USGS	2-16-27		45,000	2 -9-76	11.31	410
SANTIAGO CREEK AT MODJESKA		13	1961-	USGS	2-25-69	6.2	6,520	3 =1=76	4.80	120
SANTIAGO CREEK AI SANTA ANA		95	1928-	USGS	2-25-69	9.1(C) 9.8	6,600	2 =9=76	5.39	310
	SAN JUAN	CREEK 8	BASIN							
SAN JUAN CREEK NEAR SAN JUAN CAP	ISTRAND	106	1928-	USGS	2=25=69	5.6(AC)	22,400	9-10-76	1.80	35
	SANTA MAR RIVER BA									
SANTA MARGARITA RI NEAR TEMECULA	VER	588	1923-	USGS	2-16-27	14.6(0)	25,000	9-10-76	8.03	1,580
SANTA MARGARITA RI AT YSIDDRA	VER	739	1923-	USGS	2-16-27	18.0(C)	33,600			NO FLOW
	SAN LUIS	REY RIV	ER BASIN							
SAN LUIS REY RIVER MONSERATE NARRUWS		373	1935-41 1946-	USGS	2- 7-37	8,7(C)		3 -1-76	4.30	20
SAN LUIS REY RIVER NEAR BUNSALL		512	1916=18 1929=	USGS	3- 3-38	16.0	18,100	2 -9-76	9.02	500
	SAN OIEGU	IIO RIV	ER BASIN							
SANTA YSABEL CREEK NEAR RAMONA		112	1912-23 1943-	USGS	1-27-16	14.0(C)	28,400	2 =9=76	3.30	100
SANTA YSABEL CREEK NEAR SAN PASQUAL		128	1905-12 1947-	USGS	3-24-06	6,3(C)	8,000	2 -9-76	2.71	130
	SAN DIEGO	RIVER	BASIN							
SAN DIEGD RIVER NEAR SANTEE		377	1912-	USGS	1-27-16	25,1(0)	70,200	2 -9-76	7.72	1,150
	SWEETWATE	R RIVER	BASIN							
SWEETWATER RIVER NEAR DESCANSO		46	1905-27 1956-	USGS	2-16-27	13.2(AC)	11,200	2 -9-76	4.70	1 2 0
	TIJUANA F	RIVER BA	NIE							
TIJUANA RIVER NEAR DULZURA		481	1936=	USGS	2- 7-37	8.5	4,700	2 -9-76	3.55	100

I				. PREV				1975-1976	1
I STREAM AND STATION	. ORAINAGE	. OF	. SOURCE		DF #ELUNU		W	ATER YEAR	Ī
I	. 30 KM	. RECORD	. KEÇURD	OATE . I	STAGE . O	IN M <sup>3</sup> /S .	DATE . S	METRES .	DISCHARGE 1 IN M3/S I
			SOUT	H COASTAL AR	EA (CONTINUE	D)			
LOS	ANGELES RIVE	R BASIN							
LOS ANGELES RIVER AT SEPULVEDA DAM	409	1929-	USGS	1-25-69	3.5	390	2 -9-76	1.91	162
LOS ANGELES RIVER AT LOS ANGELES	1331	1929-	USGS	3- 2-38		1 900	2 -9-76	1.80	393
NEAR DOWNEY	370	1928-	USGS	1=25=69	4.6	1 330	9=11=76	1.94	278
SANT	A ANA RIVER	BASIN							
SANTA ANA RIVER NEAR MENTONE	541	1896=	USGS	3- 2-38	4.4(C)	1 480	9=11=76	1.86	47
SAN GABRIEL RIVER BELOW SANTA FE DAM NEAK BALOWIN PARK	611	1942-	USGS	1-26-69	6.8	874	3 -2-76	3.11	0.1
SANTA ANA RIVER AT 'E' NEAR SAN BERNAHDINO		1939-54 1966-	USGS	2=25=69	5.0	792			NO FLOW
MILL CREEK NEAR YUCAIPA	108	1919-38 1947-	USGS	1=25=69	5,1(A)	1 000	9-11-76	3.34	1 4 5
LYTLE CREEK NEAR FONTANA	119	1918-	USGS	1-25-69	4.6(A)	1 020	9-10-76	1.58	11
CAJON CREEK BELOW LONE PINE CREEK	145	1971-	USGS	12-25-71	3,2	25	STATION DI	SCONTINUEC	,
SANTA ANA RIVER AT M.W.D. CROSSING	2211	1970-	USGS	12-29-70	3,3	150	9-11-76	3.94	189
SAN JACINTO RIVER NEAR SAN JACINTO	365	1920-	USGS	2=16=27		1 270	2 =9=76	3.45	11
SANTIAGU CREEK AT MOOJESKA	33	1961-	USGS	2-25-69	1.9	184	3 -1-76	1.46	3.4
SANTIAGO CREEK AT SANTA ANA	246	1928-	USGS	2-25-69 1-16-52	2.8(C) 3.0	186	2 -9-76	1.64	8.8
SAN	JUAN CREEK E	BASIN			3,00				
SAN JUAN CREEK NEAR SAN JUAN CAPISTR	RANO 274	1928-	USGS	2=25=69	1.7(AC)	634	9=10=76	0.55	1.0
SANI	TA MARGARITA VER BASIN							*****	
SANTA MAHGARITA RIVER NEAR TEMECULA	1522	1923-	USGS	2-16-27	4.5(C)	707	9-10-76	2.45	44
SANTA MARGARITA RIVER AT YSIODRA	1914	1923-	USGS	2-16-27	5.5(C)	951			NO FLOW
SAN	LUIS REY RI	VER BASIN							
SAN LUIS REY RIVER AT MONSERATE NARROWS NR	PALA 966	1935-41 1946-	USGS	2- 7-37	2.7(0)		3 =1=76	1.31	0.6
SAN LUIS REY RIVER NEAR BONSALL	1326	1916=18 1929=	USGS	3- 3-38	4.9	512	2 -9-76	2.75	14
SAN	DIEGUITO RI	VER BASIN							
SANTA YSABEL CREEK NEAR RAMUNA	290	1912-23 1943-	USGS	1-27-16	4.3(C)	804	2 -9-76	1.01	2.8
SANTA YSABEL CHEEK NEAR SAN PASQUAL	331	1905-12 1947-	USGS	3-24-06	1.9(0)	556	2 =9=76	0.83	3.7
SAN	DIEGO RIVER	BASIN							
SAN DIEGO RIVER NEAR SANTEE	976	1912-	USGS	1-27-16	7.7(C)	1 990	2 -9-76	2.35	32
S^EI	ETWATER RIVE	R BASIN							
SWEETWATER RIVER NEAR DESCANSO	119	1905-27 1956-	USGS	2-16-27	4.0(AC)	317	2 -9-76	1.43	3.4
TIJ	UANA RIVER B								
TIJUANA RIVER NEAR DULZURA	1245	1936-	USGS	2- 7-37	2,6	133	2 -9-76	1.08	2.8
				63					

## PEAK FLOWS AND STAGES (CONTINUED)

		Р	EAK FLOWS	AND STAGES	(CONTINUED	)			
1 . I	DRAINAGE	PERIOD	. SOURCE	. PRE	IOUS MAXIM OF RECORD			1975-19 WATER Y	EAR
1 STREAM AND STATION .	AREA IN SO MILES	. OF . RECURO	. OF RECORD	DATE .	STAGE . IN FEET .	DISCHARGE . IN CFS	DATE .		DISCHARGE
			CENTI	RAL VALLEY A	REA				
SACRAME	NTO RIVER	BASIN							
SACRAMENTO RIVER AT DELTA	425	1944-	usgs	12=22=64	20.1	38,800	4 -8-76	9.41	5,740
PIT RIVER NEAR BIEBER	2475	1904-31 1951-	USGS	3-19-07	16.7	33,800	3=17=76	5.23	1,160
PIT RIVER BELOW PIT NO.4 DAM	4647	1955-	USGS	1-25-70	18.1	32,500(E)	11-25-75	7.35	1,990
MCCLOUD RIVER ABOVE SHASTA LAKE	604	1945=	USGS	12=22=55	28.2	45,200	2=26=76	13.91	3,760
SACRAMENTO RIVER AT KESWICK	6468	1938-	USGS-OWR	2=23=40	47.2(C)	186,000	5 =5=76	16.16	14,200
CLEAR CREEK AT FRENCH GULCH	115	1950-	USGS	12=22=64	13.7	7,600	2=26=76	5.84	870
CLEAR CREEK NEAR 1GO	228	1940-	USGS	12-21-55	13.8	24,500	2-26-76	5.52	1,620
COW CREEK NEAR MILLVILLE	425	1949=	USGS	12-27-51	21.6	45,200	2=29=76	11,54	14,100
COTTONWOOD CREEK NEAR COTTONWOOD	922	1940-	USGS	12=22=64	19.6	60,000	2=26=76	8.99	3,220
BATTLE CREEK BELOW COLEMAN FISH HATCHERY NEAR COTTUNWOOO	358	1961=	USGS	12=11=37	15.8(AC)	35,000	2=29=76	5.91	3,780
SACRAMENTO RIVER AT HENO BRIDGE		1960-	DWR	1-24-70	48.3	158,000	2=17=76	24.53	22,700
PAYNES CREEK NEAR REU BLUFF	93	1949-	usgs	12= 1=61	11.3	10,600	2-22-76	7.10	2,620
RED BANK CREEK NEAR REO BLUFF	94	1948-	DWR	1= 5=65	10.1	9,730	3 =7=76	9.41	6,310
ANTELOPE CREEX NEAR REO BLUFF	123	1940-	USGS	1-23-70	18.0	17,200	2=29=76	6.84	770
ELDER CREEK NEAR PASKENTA	93	1948-	usgs	2=24=58	13.9(0)	11,700	4=10=76	3.85	650
MILL CREEK NEAR LOS MOLINOS	131	1909-13 1928-	USGS	12-11-37	23.4(A)	36,400	2-29-76	5.75	1,610
THOMES CREEK AT PASKENTA	194	1920-	USGS-OWR	12-22-64	15.3	37,800	2=26=76	5.63	2,410
NEAR VINA	208	1911-15	USGS=DWR	12=10=37	19.2(A)	23,800	2-29-76	5.61	1,640
SACRAMENTO RIVER AT VINA BRIDGE	**	1945=	OwR	1-24-70 1-24-70	191.5(1)	171,000 228,000(L)	3 =1=76	174.29	34,600
SACRAMENTO RIVER AT HAMILTON CITY (BEFORE SHASTA OAM)		1927-43	OWR	12-11-37	150.7(07)	350,000(EU			
SACRAMENTO RIVER AT HAMILTON CITY (AFTER SHASTA OAM)	••	1944-	DWR	1 = 24 = 70	150.8(1)	156,000	3 -1-76	134.56	29,400
BIG CHICO CREEK NEAR CHICO	72	1930-	USGS	1- 5-65	15.4	9,580	2-29-76	4.49	820
STONY CHEEK NEAR FRUTO	598	1901-12 1960-	USGS	12-23-64	15.9	40,200	2-26-76	5.19	1,080
SACRAMENTU RIVER AT ORD FERRY (BEFORE SHASTA DAM)		1921=43	OWR	2-28-40	121.7(1)	370,000(ED			
SACRAMENTO RIVER AT ORO FERRY (AFTER SHASTA OAM)		1944-	OWR	1-24-70	119,8(7)	265,000(EL)	3 =1=76	103.22	26,900

96.9 170,000

1921-43 USGS-DWR 2- 7-42

SACRAMENTO RIVER AT BUTTE CITY (BEFORE SHASTA DAM)

## PEAK FLOWS AND STAGES (CONTINUED)

				METRIC UNI	13				
I I I STREAM AND STATION	. DRAINAGE . AREA IN	PERIOD OF	SOURCE OF	. PRI	VIOUS MAXIMU OF RECORD	)M .		1975-1976 WATER YFAR	I I
I I	. SQ KM	RECORD	RECORD	. DATE .	STAGE . IN METRES .	DISCHARGE . IN M3/8 .	DATE .	STAGE . IN MFTRES .	DISCHARGE I IN M3/S I
			CENT	RAL VALLEY	AREA				
SACRA	MENTO RIVER	BASIN							
SACRAMENTO RIVER AT DELTA	1100	1944-	USGS	12-22-64	6.1	1 100	4 -8-76	2.87	162
PIT RIVER NEAR BIEBER	6410	1904-31 1951-	USGS	3-19-07	5,1	57	3-17-76	1.59	32
PIT RIVER BELOW PIT NO.4 DAM	12035	1922-	USGS	1-25-70	5,5	920(E)	11-25-75	2.24	56
MCCLUUO RIVER ABOVE SHASTA LAKE	1564	1945-	USGS	12-22-55	R,6	1 280	2+26+76	4.24	106
SACRAMENTU RIVER AT KESWICK	16752	1938-	USGS-DWR	2-23-40	14,4(C)	5 270	5 -5-76	4.93	402
CLEAR CREEK AT FRENCH GULCH	297	1950-	USGS	12-22-64	4,2	215	2-26-76	1.78	24
CLEAR CREEK NEAR 1GO	590	1940-	USGS	12-21-55	4.2	693	2-26-76	1.68	45
COW CREEK NEA- MILLYSULE	1100	1 4 -	USGS	12-27-51	6,6	1 2 0	2-29-76	3.52	399
COTIONWUUD CHEEK NEAR COTIONWOUD	2387	1940=	USGS	12-22-64	6.0	1 700	2=26=76	2.74	91
BATTLE CREEK BELOW COLEMAN FISH HATCHERY NEAR COTTONWOOD	927	1961-	USGS	12-11-37	4,8(AC)	991	2=29=76	1.80	107
SACRAMENTU RIVER AT BENO BRIDGE		1960-	DWR	1-24-70	14.7	4 470	2-29-76	7.86	770
PAYNES CHEEK NEAR RED BLUFF	240	1949-	USGS	12- 1-61	3,4	300	2-22-76	2.16	73
RED BANK CREEK NEAR RED BLUFF	243	1948-	DWR	1= 5=65	3,1	275	3 =7=76	2.87	178
ANTELUPE CHEEK NEAR RED BLUFF	318	1940-	USGS	1=23=70	5.5	487	2=29=76	2.08	21
ELDER CRELK NEAR PASKENTA	240	1948-	USGS	2-24-58	4.2(C)	331	4-10-76	1.17	18
MILL CREEK NEAH LOS MOLINUS	339	1909=13 1928=	USGS	12-11-37	7.1(A)	1 030	2-29-76	1.75	51
IHUMES CREEK AT PASKENTA	502	1920-	USGS-DWF	12=22=64	4.7	1 070	2-26-76	1.72	68
UEER CHEEK NEAH VINA	538	1911-15 1920-	USGS-DWF	12-10-37	5,9(A)	673	2-29-76	1.71	46
SACRAMENTO RIVER AT VINA HRIDGE		1945-	DWR	1-24-70	58,4(7)	4 840 6 460(L)	3 -1-76	53.12	979
SACRAMENTO RIVER HAMILTON CITY (BEFURE SHASTA DAM)		1927-43	DWR	12-11-37	45.9(CI)	4 840(EL)			
SACRAMENTO HIVER AT HAMILION CITY (AFTER SHASIA DAM)		1944-	DWR	1-24-70	46.0(1)	4 420	3 -1-76	41.01	832
81G CHICO CHEEK NEAR CHICO	186	1930-	USGS	1= 5=65	4.7	271	2-29-76	1.37	23
STONY CREEK NEAR FRUIO	1548	1901=12 1960=	USGS	12-23-64	4 . 8	1 140	2-26-76	1.58	3 0
SACRAMENTO RIVER AT UND FERRY (BEFORE SHASTA DAM)		1921+43	UWR	2-28-40	37.1(1)	1 140(EL)			
SACRAMENTU RIVER AT URO FERRY (AFTER SHASTA DAM)		1944-	DWR	1-24-70	36,5(1)	7 500(EL)	3 =1=76	31.46	761

- - 1921-43 USGS-DWR 2- 7-42 29.5 7 500

SACRAMENTO RIVER AI BUTTE CITY (BEFURE SHASTA DAM)

1		. PREVIOUS MAXIMUM		1975-1976	I
I SIRFAM AND STATION		SOURCE DF RECORD .		WATER YEAR	I
		. RECORD . DATE . STAGE . OIS	CHARGE . DATE	. STAGE . DISCHARGE	ī
I	•	IN FEET .	IN CFS .	. IN FEET . IN CFS	I

CENTRAL VALLEY AREA (CONTINUED)												
			CENTA	RAL VALLEY	AREA (CONTI	NUED)						
SACRAMENT (CONTINU		REASIN										
SACRAMENTO RIVEH AT BUTTE CITY (AFTER SHASTA DAM)	••	1944-	USGS-DWR	2-20-58 1-24-70	96.7	160,000 225,000(L)	3 -1-76	77.85	27,400			
MOULTUN WEIR SPILL TO BUITE BASIN	••	1935-	UWR'	1-25-70 2- 7-42	83.6 83.8	36,400(8)			NO FLOW			
CDLUSA WEIR SPILL TO BUTTE BASIN		1935-	OWR	3- 1-40	70.6	86,000(8)			NO FLOW			
SACRAMENTO RIVER AT COLUSA	12110	1940-	USGS-DAR	2- 8-42	69.2	49,000	3 =2=76	55.59	23,500			
COLUSA BASIN DRAIN AT HIGHWAY 20	••	1924-	DWR	2-21-58	51.9	25,400(E)	5 =7=76	44.16	1,250			
BUTTE CREEK NEAR CHICO	147	1930-	USGS	12=22=64	14.1	21,200	2-29-76	3.16	1,270			
BUTTE SLOUGH NEAR MERIDIAN		1968-	DWR	1-26-70	61,5(E)	152,000(E)	12 -8-75	45.95	1,080			
TISOALE WEIR SPILL TO SUTTER BYPASS		1940-	DWR	3- 1-40	53.3	25,700(8)			NO FLOW			
SACRAMENTO RIVER BELOW MILKINS SLOUGH	12926	1938-	USGS	1-26-70 3- 1-40	50.7 52.8	29,300	3 =2=76	43.33	20,500			
SACRAMENTO RIVER AT KNIGHTS LANDING	14541	1921-39	USGS-DWR	1-26-70 2- 8-42	40.9	30,800	3 =2=76	27.58	23,200			
MIDDLE FORK FEATHER RIVER NEAR CLID	686	1925-	USGS	2- 1-63	16.2	14,500	2-29-76	5.68	550			
MIDDLE FORK FEATHER RIVER NEAR MERRIMAC	1062	1951-	USGS	12=22=64	26.5(A)	86,200	2=29=76	8.93	3,100			
NURTH FORK FEATHER RIVER NEAR PRATTVILLE	493	1905•	USGS	3-19-07	16,2(0)	10,000	5-25-76	2.73	60			
BUTT CREEK BELDW ALMADOR-BUTT CREEK TUNNEL NEAR PRATIVILLE	69	1936=59 1964=	USGS	12=23=64	5.9	3,830	2=29=76	1.41	550			
INDIAN CREEK NEAR CHESCENI MILLS	739	1906=18 1930=	USGS	3-19-07	20.2(C)	25,000	2=29=76	4.57	750			
SPANISH CREEK ABOVE BLACKHAWK CREEK AT KEDOIE	184	1933-	usgs	12-22-64	13.5	15,400	2=29=76	4.39	1,070			
NORTH FORK FEATHER RIVER AT PULGA	1953	1910-	USGS	12=22=64	35.8	73,000(H)	2-29-76	6,26	490			
WEST BRANCH FEATHER RIVER NEAR PARAUISE	110	1957-	USGS-DWR	12=22=64	26.2(A)	26,300	2=29=76	7.32	1,210			
FEATHER RIVER AT OROVILLE (BEFORE DROVILLE OAM)	3624	1894-67	USGS+OWR NOAA	3-19-07 12-22-64	28.2	230,000(CP) 252,000(0)						
FEATHER RIVER AT OROVILLE (AFTER URUVILLE DAM)	3624	1967=	USGS-0wR	1-25-70	15.3	56,300(N)	10-30-76	0.56	340(N)			
IMERMALITO AFTERBAY RELEASE TO FEATHER RIVER NEAR OROVILLE	••	1967-	USGS-DWR	1-28-70	23.3	21,600	4 -1-76		3,300			
FEATHER RIVER NEAM GRIDLEY (BEFORE OROVILLE DAM)	3676	1929=67	USGS-D#R	12-23-55	102.2(1)	• •						
FEATHER RIVER NEAR GRIOLEY (AFTER OPOVILLE DAM)	5676	1967-	USGS-DWR	1-27-70	92.8(1)	72,900	12 -4-75	78.53	9,400			

31 1950- USGS 12-26-64 19.3 17,600 3 -2-76 4.58

250

SOUTH HONCUT CREEK NEAR BANGOR

		PREVIOUS MAXIMUM OF RECORD	:	1975-1976 WATER YEAR	1 1
		. STAGE . DISCHARGE	. OA	TE . STAGE . DISCHARGE . IN METRES . IN M <sup>3</sup> /S	i

### CENTRAL VALLEY AREA (CONTINUEO)

SA	Ç	H	A	М	Ε	Ν	ī	Θ		R	I	٧	Ε	R	- 6	A F	S	I	Ν	
- (	C	0	N	î	τ	Ν	Ð	E	D	١										

(CONTINU	ED)									
SACRAMENTU RIVER AT BUTTE CITY (AFTER SHASTA DAM)		1944-	USGS-DWR	2-20-58 1-24-70	29.5		530 730(L)	3 -1-76	23.73	775
MOULION WELR SPILL TO BUTTE BASIN		1935=	OWR	1-25-70	25.5 25.5	1	030(B)			NO FLOW
COLUSA WEIR SPILL TO BUITE HASIN		1935-	OwR	3- 1-40	21.5	2	440(8)			NO FLOW
SACRAMENTO RIVER AT COLUSA	31365	1940-	USGS-D#R	2- 8-42	21.1	1	390	3 -2-76	16.94	665
COLUSA BASIN DRAIN AT HIGHWAY 20		1924-	DWR	2-21-58	15.8		719(E)	5 =7=76	13.46	35
BUTTE CREEK NEAR CHICO	380	1930-	USGS	12-22-64	4.3		600	2-29-76	0.96	35
BUTTE SLOUGH NEAH MERIUTAN		1968-	OWR	1-26-70	18.7(E)	4	300(E)	12 -8-75	14.01	30
TISOALE WEIR SPILL TO SUTTER BYPASS		1940-	OWR	3- 1-40	16.2		727(8)			NO FLOW
SACRAMENTO RIVER BELOW WILKINS SLOUGH	33478	1938-	USGS	1-26-70 3- 1-40	15.5 16.1		829	3 -2-76	13.21	580
SACRAMENTO RIVER AT KNIGHTS LANDING	37661	1921-39	USGS-OWR	1-26-70	12.5		872	3 +2+76	8.41	656
MIDDLE FUNK FEATHER RIVER NEAR CLIO	1776	1925=	USGS	2- 1-63	4.9		410	2-29-76	1.73	15
MIDDLE FORK FEATHER RIVER NEAR MERHIMAC	2750	1951-	USGS	12-22-64	8.1(A)	ä	440	2-29-76	2.72	87
NORTH FORK FEATHER RIVER NEAR PRAITVILLE	1276	1905-	USGS	3-19-07	4,9(0)		283	5=25=76	0.83	1.7
BUTT CREEK RELOW ALMADUR-HUTT CREEK TUNNEL NEAH PRATTVILLE	178	1936-59	ISGS	12-23-64	1.8		108	2-29-76	0.43	6.?
INUIAN CHEEK NEAR CRESCENT MILLS	1914	1906-18 1930-	USGS	3-19-07	6,2(0)		707	2-29-76	1.39	21
SPANISH CREEK ABOVE BLACKHAWK CREEK AT KEODIE	476	1933-	USGS	12-22-64	4.1		436	2-29-76	1.34	30
NORTH FORK FEATHER RIVER AT PULGA	5058	1910-	USGS	12-22-64	10.9	ā	070(H)	2-29-76	1.91	13
WEST BRANCH FEATHER RIVER NEAR PARADISE	285	1957-	USGS-OWR	12-22-64	8.0(A)		744	2-29-76	2.23	34
FEATHER RIVER AT CHOVILLE (REFURE CHOVILLE DAM)		1894-67	USGS-ONR NOAA	3-19-07 12-22-64	A.6	6	510(CP)			
FEATHER RIVER AT UMOVILLE (AFTER UMOVILLE DAM)	9386	1967=	USGS+D+R	1-25-70	4.7		590(N)	10-30-76	0.17	9.6(81
THERMALITO AFTERBAY RELEASE TO FEATHER RIVER NEAR OR VILLE		1967-	USGS-NWP	1-28-70	7.1		611	4 -1-76	0.00	93
FEATHER RIVER VEAR GRIDLEY (REFURE UROVILLE DAM)	9521	1929-67	USGS+IMP	12-23-55	31,2(1)					
FEATHER RIVER NEAR GRIVLEY (AFTER UNOVILLE DAM)	<b>95</b> 20	1967-	US 35=1 W-	1-27-70	28,3(1)		1 (60	127	3. 11	66
SOUTH HINCUT CHEEK ZEAR BANG H	8.0	1950-	5 , 8	2-26-64	5.9		4 8	3 =2=76		7.)

			~~~~~~					
I		•			PREVIOUS MAXIMUM		1975-1976	1
I	. ORAINAGE	. PERIOO	. SOURCE		OF RECORD		WATER YEAR	1
I STHEAM AND STATION	. AREA IN							
1	. SQ MILES	. RECORD	. RECORD	. DATE			. STAGE . DISCHAR	GE I
1					. IN FEET . IN	CFS .	. IN FEET . IN CF	SI

### CENTRAL VALLEY AREA (CONTINUED)

## SACRAMENTO RIVER BASIN

SACRAMENTO (CONTINUE	EO)	BASIN							
FEATHER RIVER AT YUBA CITY	3974	1943-	USGS-DWR	12-23-64 12-24-55	76.4 82.4	172,000	12 -5-75	44.45	(0)
NORTH YUBA RIVER BELUW GOODYEARS BAR	250	1930-	USGS	2- 1-63	23.8(A)	40,000	10-26-75	6.46	2,080
NORTH YUBA RIVER BELOW NEW BULLARDS BAR OAM	490	1940-	USGS	1-22-70 12-22-64	35.3 40.5(C)	56,200 91,600(M)	10-26-75	5.91	20
SOUTH YUBA RIVER NEAR CISCO	52	1942-	USGS	1-31-63	20.6(A)	18,400	10-26-75	6.20	1,350
SOUTH YUBA RIVER AT JONES BAR NEAR GRASS VALLEY	30B	1940•48 1959•	USGS	12-22-64	25.0(4)	53,600	10-26-75	7.90	1,530
YUBA RIVER RELOW ENGLEBRIGHT DAM	1108	1941-	USGS	12-22-64	564.1(C)	171,000(K)	11 -4-75	7.21	2,820
DEER CREEK NEAR SMARTVILLE	85	1935=	USGS	10-13-62	13.8	11,600	2-29-76	4.73	600
YUBA RIVER NEAR MARYSVILLE	1339	1940-	USGS	12-22-64	90.2	180,000	10-27-75	62.82	2,910
BEAR RIVER NEAR WHEATLAND	292	1928=	USGS	12-22-55 11-21-50	19.3(C) 20.8(C)	33,000	12 -1-75	6.26	430
FEATHER RIVER AT NICOLAUS	5920	1943+	USGS-0WR	12-23-55	51.6	357,000	12 -6-75	27.26	12,500
FREMONT WEIR (WEST END) SPILL TO YOLO BYPASS		1934-	DWR	12-23-55	39.7	294,000(8)			NO FLOW
SACRAMENTO RIVER AT VERONA	21257	1929-	USGS-DWR	3- 1-40	41.2	79,200	12 -8-75	20.80	27,100
SACRAMENTO WE'TR SPILL TO YOLO BYPASS NEAR SACRAMENTO		1926=	USGS-DWR	3-26-28 12-23-55	32.8 33.0	118,000(8E)			NO FLOW
NORTH FORK AMERICAN RIVER AT NORTH FORK DAM	342	1941-	USGS	12-23-64	11.9	65,400	10-26-75	3.17	3,590
NUBICON RIVER NEAR FORESTHILL	315	1958-	USGS	12-23-64	55.4(AI)		10-26-75	B.04	360
MIDDLE FORK AMERICAN RIVER NEAR FORESTHILL	524	1958-	USGS	12-23-64	69.0(AI)	310,000(1)	10-26-75	8.11	1,890
MIDDLE FORK AMERICAN RIVER NEAR AUBURN	614	1911-	usgs	12-23-64	60.4(A1)	253,000(1)	10-26-75	8.15	1,800
SOUTH FORK AMERICAN RIVER NEAR CAMINO	493	1922-	USGS	12-23-55	32.6(A)	49,800	10 -5-75	5.63	40
SOUTH FORK AMERICAN RIVER NEAR LOIUS	673	1951-	USGS	12-23-55	21.4	71,800	10-27-75	8.07	3,690
AMERICAN RIVER AT FAIR DAKS (BEFORE FOLSOM DAM)	1888	1904-55	USGS	11-21-50	31.9(0)	180,000			
AMERICAN RIVER AT FAIR DAKS (AFTER FOLSOM DAM)	1888	1955=	USGS	12-23-64	21.6	115,000	10-17-75	7.79	3,740
SACHAMENTO RIVER AT SACHAMENTO	23530	1879-	USGS-D#R	11-21-50	30.1(C)	104,000	12 -8-75	9.19	30,300
SACRAMENTO RIVER AT WALNUT GROVE		1929-	OWR	12-25-64	12.2		11 -5-75	4.52	(0)
ADOBE CHEEK NEAR KELSEYVILLE	6	1954-	USGS	12-22-64	9.1	1,500	2-29-76	4.94	90
KELSEY CREEK NEAR KELSEYVILLE	37	1946-	USGS	12-21-55	12.8	8,800	3 -1-76	3.93	70
CACHE CREEK NEAR LOWER LAKE	528	1944-	USGS	2-24-58	9.4	8,000	10 -1-75	1.90	80
				<b>CO</b>					

****************					
1			PREVIOUS MAXIMUM	. 1975-	1976
I	. DRAINAGE . PERIOD		OF RECORD	. WATER	
I STREAM AND STATION	. AREA IN . OF				
1	. SQ KM . RECORD	. RECORD . DATE	. STAGE . DISCHARGE		. DISCHARGE I
I			. IN METRES . IN M3/S	. IN METR	FS . IN M <sup>3</sup> /S I

### CENTRAL VALLEY AREA (CONTINUED)

## SACRAMENTO RIVER BASIN

SACRAMENT (CONTINU	O RIVER EO)	BASIN							
FEATMER RIVER AT YUBA CIIY	10292	1943-	USGS-OWR	12-23-64 12-24-55	23.3 25.1	4 870	12 -5-75	13.55	(D)
NORTH YUBA RIVER BELUW GOODYEARS BAR	647	1930-	USGS	2- 1-63	7.3(A)	1 130	10-26-75	1.97	58
NORTH YUBA RIVER BELOW NEW BULLARDS BAR DAM	1563	1940-	USGS	1-22-70	10.8 12.3(C)	1 590 2 590(M)	10=26=75	1.80	0.6
SOUTH YUBA RIVER NEAR CISCO	134	1942-	USGS	1=31=63	6.3(A)	521	10-26-75	1.89	38
SOUTH YUBA RIVER AT JONES BAR NEAR GRASS VALLEY	797	1940-48 1959-	USGS	12-22-64	7.6(A)	1 520	10-26-75	2.41	43
YUBA KIVER BELOW ENGLEBRIGHT DAM	2869	1941-	USGS	12-22-64	171,9(C)	4 840(K)	11 -4-75	2.20	79
DEER CREEK NEAR SMARIVILLE	550	1935-	USGS	10-13-62	4.2	328	2-29-76	1.44	16
YUBA KIVER NEAR MARYSVILLE	3467	1940-	USGS	12-22-64	27.5	5 100	10-27-75	19.15	82
BEAR RIVER NEAR WHEATLAND	756	1928-	USGS	12-22-55 11-21-50	5.9(C) 6.3(C)	934	12 =1=75	1.91	12
FEATHER RIVER AT NICOLAUS	15333	1943-	USGS-DWR	12-23-55	15.7	10 100	12 =6=75	8.31	353
FREMONT MEIR (MEST END) SPILL TO YOLO BYPASS		1934=	OnR	12-23-55	12.1	8 330(8)			NO FLOW
SACRAMENTU RIVER AI VERONA	55055	1929-	USGS-OWR	3- 1-40	12.6	2 240	12 =8=75	6.34	767
SACRAMENTO WEIR SPILL TU YOLO BYPASS NEAR SACRAMENTO		1926=	USGS-DWR	3=26=28 12=23=55	10.0	3 340 (RE	)		NO FLOW
NORTH FORK AMERICAN RIVER AT NURTH FORK DAM	885	1941-	USGS	12=23=64	3.6	1 850	10-26-75	0.97	101
RUBICON RIVER NEAR FORESTHILL	815	1958=	USGS	12-23-64	16.9(AI)		10-26-75	2,45	10
MIDDLE FORK AMERICAN RIVER NEAR FORESTHILL	1357	1958=	USGS	12-23-64	21.0(AI)	8 780(1)	10-26-75	2.47	53
MIDDLE FORK AMERICAN RIVER NEAR AUBURN	1590	1911-	USGS	12-23-64	18.4(AI)	7 160(1)	10-26-75	2.48	50
SOUTH FORK AMERICAN RIVER NEAR CAMINO	1276	1922-	USGS	12-23-55	9,9(A)	1 410	10 -5-75	1.72	1.1
SOUTH FORK AMERICAN RIVER NEAR LOTUS	1743	1951-	USGS	12=23=55	6.5	2 030	10-27-75	2.46	104
AMERICAN RIVER AT PAIR DAKS (BEFORE FOLSOM DAM)		1904-55	USGS	11-21-50	9.7(0)	2 030			
AMERICAN PIVER AT FAIR OAKS (AFTER FOLSOM DAM)	4889	1955-	usgs	12-23-64	6.6	3 260	10-17-75	2.37	105
SACRAMENTO RIVER AT SACRAMENTO	60942	1879-	USGS-OWR NDAA	11-21-50	9,2(C)	2 940	12 -8-75	2.80	858
SACRAMENIO RIVER AT WALNUT GROVE		1929=	DWR	12-25-64	3.7		11 -5-75	1.38	(D)
AOUBE CREEK NEAR KELSEYVILLE	15	1954-	USGS	12-22-64	2.8	42	2-29-76	1.51	2.5
KELSEY CREEK NEAR KELSEYVILLE	95	1946-	USGS	12-21-55	3.9	249	3 =1=76	1.20	2.0
CACHE CREEK NEAR LOWER LAKE	1367	1944-	USGS	2-24-58	2.9	226	10 -1-75	0.58	2.3

I					PREVIOUS MAXIMUM		1975-1976	1
1					OF RECORD		WATER YEAR	I
I STREAM AND STATION								
1	. SQ MI	LES . RECOR	O . RECORD	. OATE			. STAGE . DISCHAR	
					. IN FEET . IN C	. 15	. IN FEET . IN CF	5 1

			CENTA	RAL VALLEY	AREA (CONTIN	(UEO)			
SACRAMENTO (CONTINUE		BASIN							
NORTH FORK CACHE CREEK NEAR LOWER LAKE	197	1930-	USGS	12-11-37	14.0(A)	20,300	6-22-76	3.03	460
CACHE CREEK AT RUMSEY	955	1960-	USGS=OWR	1- 5-65	21.4(AC)	59,000	4 -7-76	10.92	N/A
CACHE CHEEK NEAR CAPAY	1044	1942-	USGS	2-24-58	20.9	51,600	4 -8-76	3.70	480
CACHE CREEK AT YOLO	1139	1903-	USGS	2-25-58 3-10-04	85.4 88.4(P)	41,400			NO FLOW (R
YOLO BYPASS NEAR WOODLAND	••	1939=	USGS-DWR	2- 8-42	32.0	272,000	3 -4-76	12.17	300
PUTAM CREEK NEAR WINTERS	574	1930-	USGS-DWR	2-27-40	30,5	81,000	5-13-76	8.68	960
YOLO BYPASS NEAR LISBON		1914-	OWR	12=25=64	24.7	350,000(E)	12 -4-75	6,93	(D)
SACRAMENTO RIVER AT RIO VISTA		1906-	DWR	12-26-55	10.2	(0)	5=16=76	7.63	10
SAN JOAGUI	IN RIVE	R BASIN							
WILLOW CREEK AT MOUTH NEAR AUBERRY	130	1952-	USGS	12-23-55	28.5(A)	15,700	2 -9-76	7.00	200
SAN JOAQUIN RIVER BELOW KERCHUFF POWERHOUSE NEAR PRATHER	1481	1942-	USGS	12-23-55	51.0(A)	92,200	2-16-76	13.21	2,230
SAN JOAGUIN RIVER BELOW FRIANT	1676	1907-	USGS	12-11-37	23.8(CM) 11.7	77,200(M) 12,400	5 -1-76	3.00	290
SAN JOAQUIN RIVER NEAR MENDOTA	4310	1939-	USBR-OWR	6= 1=52 6=20=41	13.8(C)	8,840 11,740(M)	6 -1-76	4.07	430
FRESNO RIVER NEAR KNOWLES	133	1911-13	USGS	12-23-55	11.5	13,300	3 -1-76	2.45	350
FRESHO RIVER NEAR DAULTON	258	1941-	USGS	12-23-55	12.6	17,500	6=22=76	5.66	400
CHOWCHILLA RIVER BELOW RAYNOR CREEK NEAR RAYMOND	254	1972-	USGS	2-11-73	9.9	11,100	12 -3-75	2.50	60
EASTSIDE BYPASS NEAR EL NIOO		1964-	OwR	2-25-69	17.6	21,700	1-21-76	7.37	5
SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE	7615	1937-	DWR	2-26-69	68.1	9,180	10 -3-75	56.99	460
MERCED RIVER AT POHONO BRIDGE NEAR YOSEMITE	321	1916-	USGS	12-23-55	21.5(4)	23,400	10-26-75	6.18	2,060
SOUTH FORK MERCED RIVER NEAR EL PORTAL	241	1950-	USGS	12-23-55	18.7	46,500	STATION	OISCONTINUED	
MERCED RIVER NEAR STEVINSON	1273	1940-	USGS	12= 5=50	73.8	13,600	10=16=75	61.42	1,430
SAN JOAQUIN RIVER NEAR NEWMAN	9520	1912-	USGS=OWR	2=26=69	65.9(A)	34,700(L)	10-14-75	52,24	1,900
ORESTIMBA CREEK NEAR NEWMAN	134	1932-	USGS	4- 2-58	6,6(C)	10,200			NO FLOW
SOUTH FORK TUOLUMNE RIVER NEAR OAKLAND RECREATION CAMP	87	1923=	usgs	12-23-55	10,9(A)	11,900	2-29-76	3.55	270
MIDDLE TUDLUMNE RIVER AT OAKLAND RECREATION CAMP	7 4	1916-	USGS	12-23-55	11.8(A)	4,920	10-27-75	3.51	250
TUOLUMNE RIVER AT MODESTO	1884	1940-	USGS-DWR	12- 9-50	69,2	57,000	1 -1-76	45.76	3,940

			,	ETRIC UNIT	8				
I		. 0F	SOURCE		VIOUS MAXIMUM OF RECORO				
I .	SQ KM		HECORO	OATE .	STAGE . I	DISCHARGE . IN M <sup>3</sup> /S .	DATE .	STAGE	ISCHARGE I IN M3/8 I
			CENTR	RAL VALLEY	AREA (CONTIN	UFD)			
	ENTO RIVER INUED)	BASIN							
NORIH FORK CACHE CREEK NEAH LOWER LAKE	510	1930=	USGS	12-11-37	4.3(A)	574	6=22=76	0.92	13
AT HUMSEY	2473	1960-	USGS-OWR	1= 5=65	6.5(AC)	1 670	a =7=76	3.33	0.0
CACHE CHEEK NEAR CAPAY	2703	1942-	USGS	2-24-58	6.4	1 460	4 -8-76	1.13	13
CACHE CREEK AT YULO	2949	1903-	USGS	2-25-58 3-10-04	26.0 26.9(P)	1 170			NO FLOW(R)
YOLO BYPASS NEAR WOODLAND		1939-	USGS-OWR	2- 8-42	9.8	7 700	3 -4-76	3.71	8.5
PUTAH CREEK NEAR WINTERS	1486	1930-	USGS-DWR	2-27-40	9,3	2 290	5=13=76	2.65	27
YDLU HYPASS NEAR LISBON		1914-	DWR	12-25-64	7.5	9 910(E)	12 -4-75	2.11	(D)
SACRAMENTO RIVER AT HIU VISTA		1906-	DWR	12=26=55	3.1	(0)	5-16-76	2.33	(D)
SAN JO	AQUIN RIVE	R BASIN							
MILLUM CREEK AT MUUTH NEAR AUBERRY	337	1952=	USGS	12=23=55	8.7(A)	444	2 =9=76	2.15	5.7
SAN JUAQUIN RIVER BELOW KERCHOFF POWERHOUSE NEAR PRAIMER	3835	1942-	USGS	12=23=55	15.5(A)	2 610	2=16=76	4.03	63
SAN JOAQUIN RIVER BELOW FRIANT	4340	1907-	USGS	12=11=37	7.3(CM) 3.6	2 190(M) 351	5 =1=76	0.91	8.2
SAN JUAGUIN KIVER NEAR MENDOTA	11163	1939-	USBR=0wR	6= 1=52 6=20=41	4.2(C)	250 332(M)	6 =1=76	1.24	15
FRESNO RIVER NEAR KNOWLES	344	1911=13 1915=	USGS	12-23-55	3,5	376	3 -1-76	0.75	9.9
FRESNU RIVER NEAR DAULTON	668	1941-	USGS	12-23-55	3.8	495	6=22=76	1.73	11
CHOWCHILLA RIVER BELOW RAYNUR CREEK NEAR RAYMO	NO 657	1972=	USGS	2=11=73	3.0	314	12 -3-75	0.76	1.7
EASTSIDE BYPASS NEAR EL N100		1964-	DWR	2=25=69	5.4	614	1-21-76	2.25	0.1
SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE	19722	1937-	OWR	2-26-69	20.8	259	10 -3-75	17.37	13
MERCEU RIVER AT POHONO BRIDGE NEAR YOSEMITE	831	1916=	USGS	12-23-55	6.6(A)	662	10-26-75	1.88	58
SOUTH FORK MERCED RIVER NEAH EL PORTAL	624	1950=	USGS	12-23-55	5.7	1 320	STATION	DISCONTINUED	
MERCED RIVER NEAR STEVINSON	3297	1940-	USGS	12- 5-50	22.5	385	10-16-75	18.72	40
SAN JOAGUIN RIVER NEAR NEWMAN	24657	1912-	USGS-OWR	2=26=69	20.1(A)	982(L)	10-14-75	15.92	53
ORESTIMBA CREEK NEAR NEWMAN	347	1932-	USGS	4- 2-58	2.0(C)	288			NO FLOW
SOUTH FURK TUDLUMNE RIVER NEAR DAKLAND RECKEATION CAMP	225	1923*	USGS	12-23-55	3,3(A)	336	2=29=76	1.08	7.6
MIDDLE TUDLUMNE RIVER AT DAKLAND RECKEATION CAMP	191	1916-	USGS	12-23-55	3.6(A)	139	10-27-75	1.07	7 - 1
TUOLUMNE RIVER AT MUDESTO	4879	1940+	USGS-OWR	12- 9-50	21.1	1 610	1 -1-76	13.95	111

1			PREVIOUS MAXIMUM		1975-1976	1
1	. DRAINAGE . PERIOD	. SOURCE .	DF RECORD		WATER YEAR	1
I STREAM AND STATION	. AREA IN . OF	. OF				-1
1	. SO MILES . RECORD	. RECORD . DATE	. STAGE . DISCHAP	RGE . DATE	. STAGE . DISCHARGE	1
I			. IN FEET . IN CF	3 .	. IN FEET . IN CF9	I

			CENT	RAL VALLEY	AREA (CONTIN	UEO)			
SAN JOAQU (CONTINU		ER BASIN							
SUUTH FORK STANISLAUS RIVER NEAR LONG BARN	67	1937=	USGS	11-21-50	9.3	4,900	12 =3=75	1.16	10
STANISLAUS RIVER AT ORANGE BLUSSOM BRIDGE		1928-39 1940-	DWR	12-23-55	31.8	62,000	10-20-75	5.96	1,560
STANISLAUS RIVER AT RIPON	1075	1940-	USGS=DwR	12-24-55 2-12-38	63.3 64.4(A)	62,500	10-24-75	42.58	1,480
SAN JOAQUIN RIVEH NEAR VERNALIS	13540	1955-	USGS-DWR	12= 9=50 1=27=69	32.8(C) 34.6	79,000 52,600	10-19-75	15.72	5,720
DUCK CREEK NEAR STOCKTON		1950-	DWR	1=16=73	6.5	780	2-14-76	2.70	20
SOUTH FORK CALAVERAS RIVER NEAR SAN ANDREAS	118	1950=	USGS	12-23-55	10.3	17,600	3 =3=76	2.23	80
MORMON SLOUGH AT BELLOTA		1948-	DWR	4- 2-58	20.7	15,400(E)	1-24-76	4.89	150
STOCKTON DIVERTING CANAL AT STOCKTON	••	1944-	DWR	4= 4=58	17.1(E)	11,400(E)	2-17-76	6.42	480
CALAVERAS RIVER NEAR STOCKTUN		1958-	UWR	1= 6=65	12.6	760(E)	5=14=76	4.34	60
HEAR CREEK NEAR LOCKEFORD	48	1930-	USGS	4- 3-58	15.1	2,930	2=20=76	4.78	30
COLE CREEK NEAR SALT SPRINGS DAM	20	1927-42	USGS	12-23-64	10.2	6,140	10-26-75	4.51	1,290
SUUTH FORK MOKELUMNE RIVER NEAR WEST POINT	75	1933-	USGS	12-23-55	14.8(AC)	6,920	2-29-76	3,52	130
MOKELUMNE RIVER NEAR MOKELUMNE HILL	544	1901-	USGS	12- 3-50	18.5	33,700	10=27=75	5.16	2,060
MOKELUMNE RIVER AT WOODBRIDGE	661	1924=	USGS	11-22-50	29.6	27,000	10=29=75	14.34	1,890
MOKELUMNE RIVER NR THORNTON (BENSON FERRY)	2045	1911=			18.0(0)	<b>•</b> •(0)	11 =5=75	4.43	(0)
ORY CREEK NEAR GALT	329	1926=33	USGS=OWR	4- 3-58	15.3	24,000	10-11-75	4.59	290
NORTH FORK COSUMNES RIVER NEAR EL OORADO		1911-41							
SOUTH FURK COSUMNES RIVER	205		USGS	12-23-55	14.8	15,800	10+27-75	3.47	250
NEAR RIVER PINES COSUMNES RIVER	64	1957-	USGS	2- 1-63	10.9	5,540	3 -1-76	1.36	40
AT MICHIGAN BAR	536	1907-	USGS=DWR	12-23-55	14.6 16.3(A)	42,000	10-27-75	3.80	430
COSUMNES RIVER AT MCCONNELL	724	1941-	USGS	12-23-55	46.3	54,000	10-28-75	32.54	380
TULARE LA	KE BAS	IN							
TULE RIVER NEAR SPRINGVILLE	247	1957=	usgs	12- 6-66	19.7(AC)	49,600	3 -1-76	4.88	310
TULE RIVER HELOW SUCCESS DAM	593	1953=	uses	12-23-55	21.7(C) 26.0(AC)	27,000 32,000(M)	10 -1-75	5.49	350
KAWEAH RIVER AT THREE RIVERS	418	1958=	USGS	12- 5-66 12- 5-66	16.7 19.0(A)	73,000	9=11=76	7.79	4,480
KINGS RIVER BELUW NORTH FORK	1342	1951-	usgs	12-23-55	23.1	85,200	9-11-76	8.59	7,470
HUENA VIS	STA LAK	E BASIN							
KERN RIVER AT KERNVILLE	1009	1905=12 1953=	usgs	12- 6-66	19.3(A)	74,000	9-11-76	5.92	2,010

## PEAK FLOWS AND STAGES (CONTINUED)

			,	ETRIC UNI	S (CONTINUED)				
I	DRAINAGE		SOURCE	PRI	EVIOUS MAXIMU OF RECORD			1975-1976 WATER YEAR	I I
I STREAM AND STATION	AREA IN SQ KM	. OF	. QF	DATE .	STAGE . IN METRES .	DISCHARGE . IN M <sup>3</sup> /S .	OATE .	STAGE . ( IN METRES .	ISCHARGE I IN M <sup>3</sup> /S I
					AREA (CONTIN	UED)			
SAN JO	DAQUIN RIVE TINUEO)	R BASIN							
SOUTH FORK STANISLAUS RIVER NEAR LONG BARN	173	1937-	usgs	11-21-50	2.8	138	12 =3=75	0.35	0.3
STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE		1928-39 1940-	DWR	12-23-55	9.7	1 760	10-20-75	1.82	44
STANISLAUS RIVER AI RIPON	2784	1940-	USGS-OWR	12-24-55 2-12-38	19.3 19.6(A)	1 770	10-24-75	12.98	41
SAN JUAQUIN RIVER NEAH VERNALIS	35068	1922•	USGS-OWR	12- 9-50 1-27-69	10.0(C) 10.5	2 240 1 490	10-19-75	4.79	161
DUCK CHEEK NEAR STOCKTON		1950-	DWR	1=16=73	2.0	55	2-14-76	0.82	0.6
SOUTH FORK CALAVERAS RI NEAR SAN AMOREAS	VER 305	1950-	USGS	12-23-55	3 + 1	498	3 -3-76	0.68	2.3
MORMUN SLOUGH AT BELLOTA		1948-	OWR	4- 2-58	6.3	436(E)	1-24-76	1.49	4.2
STOCKTON DIVERTING CANAL AT STOCKTON		1944-	DWR	4- 4-58	5.2(E)	322(E)	2-17-76	1.96	13
CALAVERAS RIVER NEAR STOCKTON		1958-	OWR	1- 6-65	3,8	21(E)	5-14-76	1.32	1.7
BEAR CREEK NEAR LOCKEFORD	124	1930-	USGS	4- 3-58	4.6	82	2-20-76	1.46	0.8
COLE CHEEK NEAR SALT SPRINGS DAM	52	1927-42	USGS	12-23-64	3.1	173	10-26-75	1.37	36
SOUTH FORK MOKELUMNE RI NEAR WEST PUINT	VER 194	1933-	usgs	12-23-55	4.5(AC)	195	2-29-76	1.07	3.7
MOKELUMNE RIVER NEAR MOKELUMNE MILL	1408	1901-	usgs	12- 3-50	5.6	954	10-27-75	1.57	58
MOKELUMNE RIVER AT WOUDBRIDGE	1711	1924-	USGS	11-22-50	9.0	764	10-29-75	4.37	53
MOKELUMNE RIVER NR IMURNTON (BENSON FER	RRY) 5296	1911-	DWR-NDAA	12-24-55	5.5(C)	(D)	11 -5-75	1.35	(0)
DRY CREEK NEAR GALT	852	1926-33	USGS-DWR	4= 3=5A	4.7	679	10-11-75	1.40	8.2
NORTH FORK COSUMNES RIV	/ER 530	1911-41	USGS	12-23-55	4.5	447	10-27-75	1.06	7.1
SOUTH FURK COSUMNES RIV NEAR RIVER PINES	VER 165	1957-	USGS	2- 1-63	3.3	156	3 -1-76	0 . 4 1	1.1
COSUMNES RIVER AT MICHIGAN BAR	1388	1907-	USGS-OWF	12-23-55	4.5 5.0(A)	1 190	10-27-75	1.16	12
COSUMNES HIVER AT MCCUNNELL	1875		USGS	12-23-55	14.1	1 530	10-28-75	9.92	10
TULE RIVER									
NEAR SPRINGVILLE TULE RIVER	639		USGS	12- 6-66	6,0(AC)	1 400	3 -1-76	1.49	8.8
BELOW SUCCESS DAM	1017	7 1953•	USGS	12-23-55	6,6(C) 7,9(AC)	764 906(M)	10 -1-75	1.67	9.9
KAWEAM RIVER AT THREE RIVERS	108	1958-	USGS	12- 5-66 12- 5-66	5.1 5.8(A)	2 070	9=11=76	2.37	126
KINGS RIVER BELOW NORTH FORK BUEN	3479 A VISTA LAI	5 1951 • CE BASIN	USGS	12-23-55	7.0	2 410	9-11-76	2.62	211

5.9(A)

2 100

9-11-76

1.80

12- 6-66

1905-12 2612 1953-

USGS

KERN RIVER AT KERNVILLE

1		PERIOD	. SOURCE	. PRE	OF RECORD	UM		1975-197	
1	. SO MILES	. RECORO			. STAGE .	DISCHARGE	. DATE .	STAGE . IN FEET .	DISCHARGE I IN CFS I
				THERN LAHON		•••••			
HONEY	LAKE BASI	N							
WILLOW CREEK NEAR SUSANVILLE	90	1950-	USGS	2= 1=63	5.6	820	12-31-75	2.78	50
SUSAN RIVER AT SUSANVILLE	184	1917-21 1950-	USGS	12-22-64	7.3	5,100	2-29-76	2.92	180
	ID AND WINE	NEMUCCA							
LITTLE TRUCKEE RIVER AS BOCA RESERVOIR NEAR BO		1903-10 1939-	USGS	2- 1-63	9.0	13,300	5 -5-76	2.28	660(R)
TRUCKEE RIVER	932	1899-	USGS	11-21-50	14.5(A)	17,500	10-26-75	4.42	1,500(R)
CARSO	N RIVER BA	SIN							
EAST FORK CARSON RIVER BELOW MARKLEEVILLE CRE	EK 276	1960-	USGS	1=31=63	10.2	15,100	5-14-76	4.04	790
WEST FORK CARSON RIVER AT WOODFORDS		1900-07 1938-	USGS	2= 1=63	9.0	4,890	10-26-75	2.37	260
WALKE	R LAKE BAS	IN							
WEST WALKER RIVER HELOW LITTLE WALKER RIVER NEAR COLEVILLE	180	1938-	USGS	11-20-50	8.1	6,220	5-14-76	3.44	830
EAST WALKER RIVER NEAR BRIOGEPORT	359	1911-14	USGS	6=19=63	4.6	1,390	5-20-76	1.97	260(R)
			80U	THERN LAHON	TAN AREA				
MALOM	E RIVER BA	SIN							
MOJAVE RIVER AT LOWER NARROWS NEAR VICTORVIL		1899-06 1930-	USGS	3- 2-38	23.7	70,600	2-10-76	3.24	370
MOJAVE RIVER AT BARSTOW	1290	1930-	USGS	3- 3-38	8.6	64,300			N/A
MOJAVE RIVER AT AFTON	2120	1929-32 1952-	USGS	1=26=69	10.4	18,000	976	7.08	1,090

I I STREAM AND STATION	. ORAINAGE	PERIOD	SOURCE	• PREV	OF RECORD	UM .		1975-1976 WATER YEA	iR 1
I STREAM AND STATION	_ SU KM	N OF RECORD RE		- DATE -	STAGE	UISCHARGE .	. UAIE .	STAGE .	UISCHARSE
			NOR	THERN LAHONTA	AN AREA				
HONEY	LAKE BASIN	ı							
WILLOW CREEK NEAR SUSANVILLE	233	1950-	USGS	2= 1=63	1.7	23	12-31-75	0.85	1.4
SUSAN HIVER AI SUSANVILLE	476	1917-21 1950-	USGS	12=22=64	5.5	144	2-29-76	0.69	5.1
	IO AND WINE S BASIN	IEMUCCA							
LITTLE TRUCKEE HIVER AS BOCA RESERVOIR NEAR BO	OVE CA 378	1903-10 1939-	USGS	2= 1=63	2.7	376	5 =5=76	0.69	1A(R)
TRUCKEE RIVER	2413	1899-	USGS	11-21-50	4.4(A)	495	10-26-75	1.35	42(R)
CARSO	N RIVER BAS	BIN							
EAST FORK CARSON RIVER BELOW MARKLEEVILLE CHE		1960=	USGS	1-31-63	3,1	427	5-14-76	1.23	22
WEST FORK CARSUN RIVER AT WOODFORDS	170	1900-07 1938-	USGS	2- 1-63	2.7	138	10-26-75	0.72	7.4
WALKE	R LAKE BAS	IN							
WEST WALKER RIVER BELOW LITTLE WALKER RIVER NEAR COLEVILLE		1938-	USGS	11=20=50	2.5	176	5-14-76	1.05	23
EAST WALKER RIVER NEAR BRIDGEPORT		1911-14 1921-	USGS	6=19=63	1.4	39	5-20-76	0.60	7.4(R)
			sou	THERN LAHONT	AN AREA				
MOJA	E RIVER BA	SIN							
MOJAVE RIVER AT LOWER NARROWS NEAR VICTORVII	LE 1331	1899=06 1930=	USGS	3- 2-38	7.2	2 000	2-10-76	0.99	10
MOJAVE RIVER AT BARSTON	3341	1930-	USGS	3- 3-38	2.6	1 820			N/A
MOJAVE RIVER AT AFTON		1929-32 1952-	USGS	1=26=69	3.2	509	976	2.16	30

## LEGEND

USGS United States Geological Survey USBR United States Bureau of Reclamation National Weather Service (National Oceanic and Atmospheric NOAA Administration) USCE United States Corps of Engineers DWR Department of Water Resources PG&E Pacific Gas and Electric Company A From flood marks B Discharge over weir or spillway C Site or datum then is use D Discharge not determined, affected by backwater or tide E Estimated F From DWR telemetering log G Preliminary H Includes flow through power plant I Due to failure of partially completed dam J Gage height revised K Flow through power plant not included Discharge at latitude of gaging station site Prior to construction of upstream dam M Includes flow through fish hatchery but not upstream N diversion to Thermalito Afterbay P Observed Estimated peak inflow to partially completed 0 Oroville Reservoir R Regulated stage and flow S Revised to current datum T Datum of gage is 0=0 USED U Crest stage partial recorder N/A Not available at report time

### METRIC EQUIVALENTS

1	square mile	=	2.59 square kilometres (km <sup>2</sup> )
ī	cubic foot per second (cfs)	=	0.028 cubic metre per second (m <sup>3</sup> /s)
	foot		0.305 metre

Peak of record established current year







# THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

BOOKS REQUESTED BY ANOTHER BORROWER ARE SUBJECT TO RECALL AFTER ONE WEEK. RENEWED BOOKS ARE SUBJECT TO IMMEDIATE RECALL

JUN 1 3 1980

RECEIVED

NOV 31-

PHYS SCI LIBRARY

APR 5 1982

APK LIEINIEL

11.2

PHYS SILI MARY

JUN 30 1984

RECEIVED

JUL 3 0 1984

LIBRARY, UNIVERSITY OF CALIFORNIA, DAVIS

D4613 (12/76)





